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A GUIDE
TO THE
MEDIAEVAL ANTIQUITIES
AND OBJECTS OF LATER DATE



PLATE I. THE ROYAL GOLD CUP.

11
76
BRITISH MUSEUM

118, 2
F. 118, 2
A Guide

to the

Mediaeval Antiquities
and
Objects of Later Date

IN THE DEPARTMENT OF BRITISH
AND MEDIAEVAL ANTIQUITIES

WITH SEVENTEEN PLATES AND TWO HUNDRED AND
SEVENTEEN ILLUSTRATIONS

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PREFACE

IN the present edition the system followed in the old *Guide to the Mediæval Room* (1907) has been retained; the alphabetical Glossary is appropriate to a collection so varied and comprehensive in its nature, and has been found convenient in practice.

The general period covered by this Guide embraces the range of centuries from the eleventh to the eighteenth, but certain series of more ancient date, such as Early Christian ivory carvings and the Treasure of the Oxus, are included for specific reasons. Antiquities in the Department dating from the fall of the Roman Empire to the eleventh century are exhibited in the Iron Age Gallery, and described in the *Guide to the Anglo-Saxon and Foreign-Teutonic Antiquities*, published in 1923. The present volume is naturally concerned with the collections in the care of the Department. But the student should not neglect the important series of mediæval manuscripts, the coins, and the pottery, preserved respectively in the Departments of Manuscripts, Coins and Medals, and Ceramics and Ethnography: the pottery will be found in the same gallery as the majority of the objects here described. The monumental sculpture of the Middle Ages, practically unrepresented at Bloomsbury, must be studied in the Victoria and Albert Museum, where other fine examples of mediæval art are exhibited.

53/54-9
The removal of the collections from the old Mediæval Room to the western half of the King Edward VII Gallery was begun in the summer of 1914. The greater part was opened to the public in 1919, but the installation will only be completed during the present year with the final arrangement of the Franks Room at the end of the Gallery. This room is called after Sir A. Wollaston Franks, K.C.B., first Keeper of the Department, and the most continuous and discriminating of its benefactors (p. 302). As it has been impossible

at the time of publication to place all these objects in their final positions, the references to the contents of certain Cases must necessarily be less exact than could be desired. The collection of plaquettes is not in the King Edward VII Gallery, but is exhibited with other examples of minor sculpture in a small room on the first floor of the building next the Exhibition Room of the Department of Coins and Medals, in order that it may be studied in connexion with the medals of the Renaissance.

The principal large additions since the publication of the *Guide to the Mediaeval Room* in 1907 have been the Barwell Bequest of painted enamels (p. 287), the Whitcombe Greene Collection of plaquettes (p. 313), and the series of fine mediaeval ivory carvings and works of art in metal bequeathed by Mr. Charles Borradaile in 1923.

In preparing this edition I have collaborated with Mr. A. B. Tonnochy, Assistant in the Department.

The Trustees are indebted to the Council of the Society of Antiquaries of London for permission to use plate IX and figures 11, 26, 72, 86, 88, 89, 121, 123, 146, 164, and 189.

Reproductions on postcards of ivory carvings, enamels, and certain objects illustrative of English history may be purchased at the sale counters. Catalogues of the ivory carvings, finger-rings, post-classical engraved gems, the Treasure of the Oxus, and the Waddesdon Bequest can be obtained through the same sources, or by application to the Director's Office.

O. M. DALTON,
KEEPER OF THE DEPARTMENT OF BRITISH
AND MEDIAEVAL ANTIQUITIES.

March, 1924.

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GLOSSARY

ABSOLUTION CROSSES AND MORTUARY CROSSES.

THESE crosses were cut from a sheet of lead and inscribed with formulae of absolution; they were placed upon the breasts of the dead in the eleventh and twelfth centuries, and have been found in various parts of England and France.

Mortuary crosses, also made of lead, were commonly inscribed with the words *Crux Christi pellit hostem*, *Crux Christi triumphat*, or with the name of the deceased. Examples have been found at Bury St. Edmunds (Table-Case, Bay XVII) and elsewhere. The plain lead crosses in the same Case are ascribed to the fourteenth century.

AGNUS DEI.

These words, meaning 'Lamb of God', are used in their material sense to describe medallions impressed with the Lamb and cross bearing a flag, made at Rome out of the wax of the Paschal Candle. Before the sixteenth century, perhaps from the ninth, they were made at the Lateran on Holy Saturday and distributed to the faithful on Easter Sunday or the Saturday preceding the Sunday after Easter; the oldest existing example is said to be that in the Museum at Poitiers, dating from 1370. Mediaeval examples were highly valued and worn, like relics, to avert pestilence, fire, tempest, and sudden death. The Agnus Dei of precious metal, often mentioned in mediaeval inventories, was usually a pendant of small size, the wax contained in which was consecrated at Rome. Such pendants are described in the inventories of Henry V of England and René of Anjou; Mary Queen of Scots possessed two of them.

From the sixteenth century, wax medallions have been solemnly blessed by each Pope at the beginning of his pontificate, and every seventh year afterwards; when the supply is exhausted, additional benedictions have taken place. The medallions have varied both in size and design at different periods; the diameter has ranged from about an inch and a quarter to about eight inches. Before the latter part of the sixteenth century, they were commonly painted and gilded, but in 1572 this kind of decoration was forbidden. Forgeries were often made for sale, but the practice was condemned in papal bulls, and the makers were punished if detected.

The example shown in Table-Case, Bay XVI, dates from the pontificate of Clement XI (1700-21); in the same case is an earlier bronze matrix for making impressions.

'Hallowed wax' stamped with the Agnus Dei was sometimes worn as a talisman or amulet to protect the wearer from wounds, pain or evil influences, as noted by Scot in his *Discoverie of Witchcraft*, written in the sixteenth century.

AILETTES. See p. 12.

ALABASTER CARVINGS.

The Museum does not contain any example of the large tomb-effigies of alabaster made in England in the fourteenth and

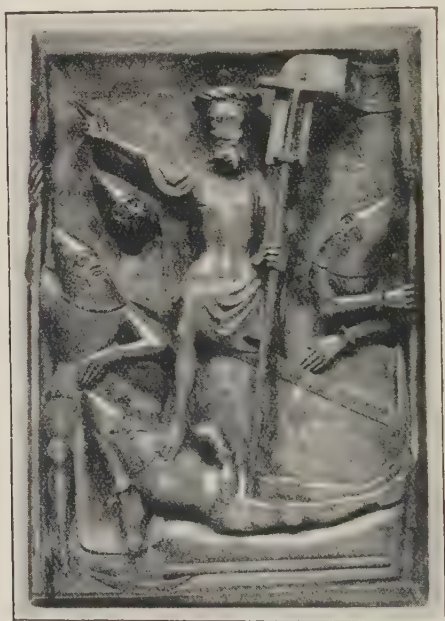


FIG. 1.—Alabaster panel : the Resurrection.
Late fourteenth century.

fifteenth centuries; the mediaeval sculpture in this material which it possesses, takes the form of panels or 'tables' of the same period, with religious subjects in relief, originally coloured and gilded. The alabaster for these panels, like that of the effigies, was obtained from Tutbury in Staffordshire, and Chelaston Hill in Derbyshire; thence it was easily taken by river to Nottingham, where much of the carving was done. Further

transport by road and sea presented little difficulty, and the material was also worked at York, Burton, Norwich, Lincoln, and London. The slabs or tables sometimes formed part of the 'tomb-chests', on which recumbent effigies lay in churches. But by far the greater number were made to be placed above altars, either fixed to or hung against the wall singly and in small groups, or framed in oak retables in larger sets. The retables usually had a series of five or seven tables, the broader panels often alternating with others of narrower form, carved with single figures; more rarely, as in the fine examples in the church of La Celle (Eure, France) and in the Museum at Compiègne, there



FIG. 2.—Alabaster panel : the murder of Becket.
Fifteenth century.

were two tiers with ten or fourteen tables. There was a large export of English alabaster work to the Continent, and examples are found not only in France, but in Spain, Italy, Germany, Scandinavia, and even in Iceland. The complete retables are almost all abroad, the removal or destruction of English church furniture in the sixteenth century resulting in the loss or disintegration of those once decorating our churches. A complete

reredos in its oak frame is, however, to be seen in the Victoria and Albert Museum.

The panels made for placing against the wall without frames are earlier than those intended for fixing in wooden retables, and are neatly finished at the edges. Among the earliest are the fine fragments from Kettlebaston church, Suffolk (Pier Case, Bay XV, F), which Professor Prior conjectures to have been worked in London rather before 1350; about twenty-five years later is the panel with the Resurrection (fig. 1), where an approximate date is given by the style of the helmets and the armour of the soldiers. This panel has still the neatly finished edges of the earlier class, which are also found on those with embattled upper edges represented in the collection. From the first quarter of the fifteenth century, for about a hundred years, the tables had rough edges concealed by the wood of the retables; each was commonly placed under a detached alabaster head-piece worked in tracery, the description being painted on the wood beneath it, as on the retable at South Kensington.

The most frequent subjects for retable sets are derived from the Passion, from the life of the Virgin, and from the lives of Saints. A subject frequently produced at Nottingham consisted of the head of St. John the Baptist between St. Peter and St. William of York.

As Professor Prior has remarked, these brightly painted reliefs, with their animated narratives, represent a picture-craft rather than a sculpture based upon the tradition of glyptic art in stone. But quite apart from the interesting treatment of the subjects, their decorative quality is high, and the general effect has the charm of vivid and sincere expression. It will be noticed how well the alabaster carvings in the lower part of the Pier-Case (Bays XX, XXI) harmonize with the rather earlier mediaeval ivory carvings above them, which are conceived in a similar spirit.

ALPHABETS. *See* p. 156.

AMULAE. *See* p. 56.

AMULETS. *See* p. 163.

APPLE-SCOOPS. *See* p. 196.

AQUAMANILES. *See* p. 242.

ARMILLARY DIALS. *See* p. 71.

ARMORIAL PENDANTS.

These small pendants, usually shield-shaped, though sometimes in the form of circles, lozenges, quatrefoils, &c., are furnished with a loop at the top for suspension. They are generally of bronze, enamelled with arms and devices by the *champlevé* process (p. 75), the exposed parts of the metal being gilded.

They seem to have been used in various ways. A bronze equestrian aquamanile (p. 242) of the thirteenth century belonging to the Carrand Collection in the Bargello at Florence, and

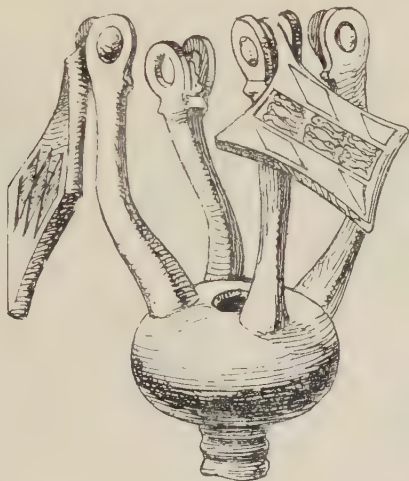


FIG. 3.—Part of bronze horse-trappings, showing use of armorial pendants: found at Salisbury. (Not in the collection.)

a miniature in a manuscript in the Library at Trinity College, Cambridge, show that pendants of this kind were hung in a row along the *peytrel*, the band crossing the chest of a knight's horse. But they were sometimes attached to metal fittings of the kind shown in Table-Case, Bay XIX (fig. 3), which in like manner appear to have formed part of the trappings of a horse. They were attached in such a way as to swing with the movement of the animal, adding brilliance and colour to the harness.

Small enamelled escutcheons were also worn on the person by heralds, messengers, and dependants of princes or barons in order to show upon whose business they travelled. They are thus analogous to the badges carried by Kings' Messengers in modern

times (example of time of George III in Table-Case, Bay XVI). They further appear to have been worn about the neck by knights about the end of the fourteenth century. The monument of Sir John Cockayne at Ashbourne supplies an example in England, and others exist on the Continent.

Armorial pendants were most common in the fourteenth and



FIG. 4.—Enamelled armorial pendants. Thirteenth to fifteenth centuries.

fifteenth centuries, especially between 1350 and 1450; they appear to have been made in different countries, especially in England, France, and Spain. Several examples in the Museum series are Spanish, and were probably produced in Castile.

ARMS AND ARMOUR.

The collection of arms and armour in the Museum, principally consisting of the Meyrick and Burges Bequests, is small and unrepresentative, the national collections being in the Tower of London

and in the Wallace Collection at Hertford House, where ancient armour may best be studied in London. But one advantage in the presence even of a small series in a place like the British Museum lies in the opportunities there afforded for comparison not only with the armour of primitive tribes, but also with that of ancient civilizations, so that it is possible for a student to follow the evolution of weapons of offence and defence from the earliest stages of primitive culture down to the invention of fire-arms. Thus in the Ethnographical Collection there may be seen the weapons and means of defence devised by primitive man in many parts of the world, and in other galleries those of the great civilized peoples of antiquity. Body-armour is less frequently found among savage tribes than weapons of attack, but attention may be specially drawn to the elaborate suits of coconut fibre manufactured by the natives of the Gilbert Islands in the Pacific; to the coats covered with fish-scales, worn in Borneo; to the brass breast-plates of the Basuto of South Africa, and to the corslets of wooden lath formerly used by tribes on the North-West Coast of America, probably as a result of intercourse with the Asiatic continent. Quilted or padded coats have been worn in widely distant parts of the world, for instance by the Ancient Mexicans, by the Baghirmi of the Western Soudan, and the Arabs of its eastern extremity. Turning to civilized nations we may note that the Egyptians protected themselves with coats of woven and prepared flax formed of superimposed layers, a light and practical defence afterwards adopted by the Greeks and Romans, and similar in effect to the quilted armour mentioned above. The Greeks wore bronze corslets, in two parts (back- and breast-plates) moulded to the shape of the body, greaves covering the lower part of the legs, and metal helmets. The Etruscans and the Romans followed them in this, but the latter nation had also other varieties of body-armour, perhaps borrowed from the oriental peoples with whom they came in contact. Thus they wore leather or linen corslets covered with overlapping metal scales, a principle long in vogue among the ancient Persians and their neighbours in Central Asia, and exemplified in remains found in Graeco-Scythian tombs in Southern Russia as early as the fourth century B.C. Such armour was evidently of wide distribution in Inner Asia, and was made of various materials, the plates being not only of metal, but sometimes of other substances, such as pared horse's hoof; and its long persistence is proved by the fact that Tibetan soldiers fought in it against the British Expedition in 1905 (a suit in the Asiatic Saloon, Wall-Cases 19 and 20). The Romans also applied disks and rings of metal to a leather or linen basis, but it has been questioned whether the rings were connected in such a way as to form a true chain mail, though discoveries of such mail have been made under conditions

which make a Roman origin possible. The Celtic inhabitants of Central and Western Europe imitated in part the equipment of the peoples to the south of them: examples of their shields and helmets may be seen in the Iron Age Gallery, and are described in the *Guide to the Antiquities of the Early Iron Age*, where the occasional adoption of metal scales and rings to protect the body is also noticed. The rank and file of the Teutonic tribes who overthrew the Roman Empire went into battle without any protection upon the body or the head, relying for defence almost

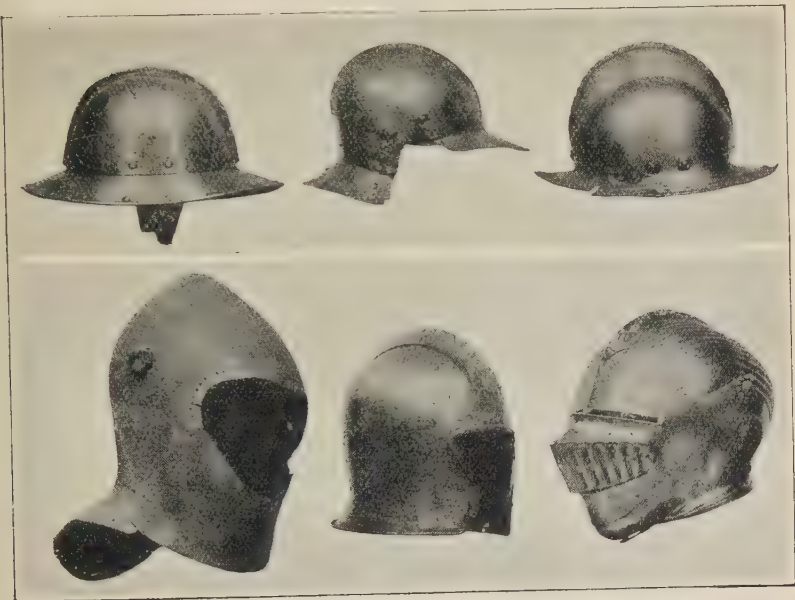


FIG. 6.—Helmets. Fourteenth to seventeenth centuries.

entirely on a wooden shield covered with hide and having in the centre a high iron umbo or boss (examples of such bosses in the Iron Age Gallery). But helmets and corslets were worn by the Frankish aristocracy in the sixth century; after the time of Charles the Great, the Frankish royal guard adopted the metal helmet, while in other divisions of the army a padded tunic covered with small pieces of metal was worn. It is thus apparent that before the period to which the term *mediaeval* is commonly applied, some of the better-known styles of protecting the body had already been adopted in principle: the scale, the ring, and the continuous metal plate had all been employed.

During the Middle Ages, from the time of the Crusades to the sixteenth century, elaborate defensive armour was worn only by mounted knights, who constituted the most formidable part of the feudal army. Their retainers, who fought on foot, were often indifferently armed, and without uniformity of equipment until

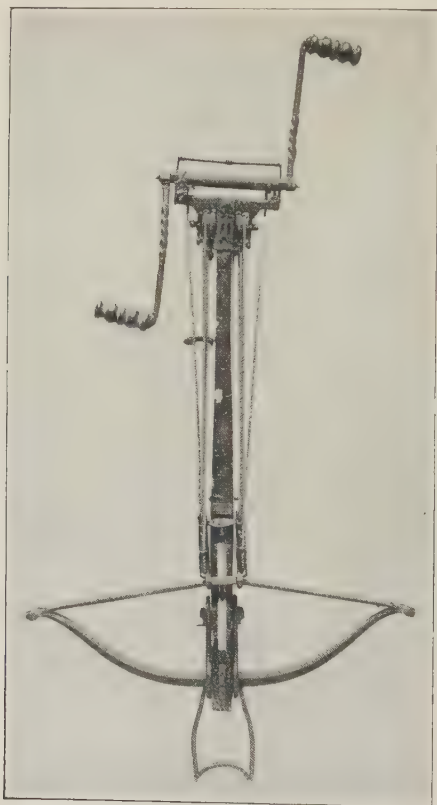


FIG. 7.—Cross-bow. Sixteenth century.

organization was improved on the establishment of trained bodies of archers; the early armour and weapons seen in museums are therefore for the most part those of knights. The main outlines of development down to the introduction of fire-arms may now be briefly indicated.

Norman armour is known to us through the representations upon the Bayeux tapestry. The body was protected by a long,

narrow shirt or hauberk of leather or woven stuff covered by metal rings, which were either sewn separately to the surface, as the rendering of the tapestry would appear to indicate, or else interlinked so as to form a genuine mail. It will have been gathered from what has preceded that there is some uncertainty as to the date at which genuine mail was introduced. It is possible that it was already known in the East about the time of the Christian Era, and that the Romans were acquainted with it; it is equally possible that the Normans knew how to make it, for the Bayeux pictures, in which the rings are seen in isolation, are executed in a very conventional style. Until, however, pieces of such mail of a date anterior to the twelfth century are discovered under unimpeachable conditions the point cannot be finally decided. The long Norman hauberk was slit at the bottom, so that the lower halves might be wrapped round the legs when the rider was mounted. The lower legs seem as a rule to have been protected only by some form of bandaging, as had been the case in Carolingian times. The shield was usually very long, rounded at the top and pointed at the bottom.

During the period succeeding the Norman Conquest down to about 1200 many changes were introduced, but the principal point to notice is that armour was now made throughout of flexible mail. The hauberk was fashioned entirely of interlinked rings, so as to be independent of any leather or woven basis: it had long sleeves, to which mittens were ultimately added, and a hood or coif to be drawn over the head. In one form or another this mail-coat continued in use down to the beginning of the fifteenth century, and even then it continued for a time to be worn under the plate armour. In its earliest form it was gathered in at the waist by a belt, and under it was worn a quilted garment called a *gambeson* or *aketon*, over a linen tunic. The alteration in the fashion of the hauberk followed a change in civil dress, and it should be noted that alterations in armour frequently accompanied such changes: the coifed hauberk of the twelfth century was, in fact, the woollen dress of the period translated into mail, as the earlier Norman hauberk had been little more than a shirt stiffened so as to withstand thrusts or blows. As the period advanced, the legs were covered with mail *chaussons* above the knee, and below it with *chausses*, which were made to cover the feet. The sword-belt, which had been worn over the right shoulder, was changed to the waist. Down to the close of the twelfth century a tight-fitting head-piece was worn over the mailed hood or coif; but about the year 1180 it was replaced by a great cylindrical, flat-topped helm, so large that its lower edges actually rested on the shoulders to the serious risk of the collar-bone. This cumbrous helm, which was furnished with slits for the eyes, was carried suspended by a chain from the saddle-bow, and only put

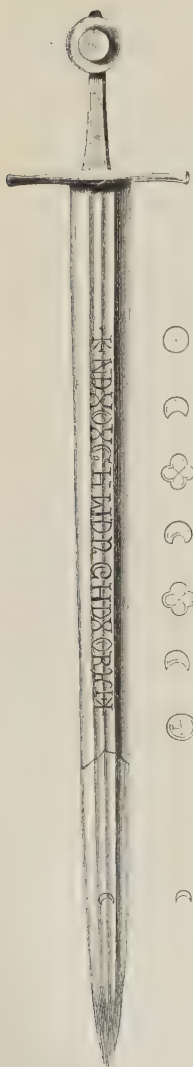


FIG. 8—Inscribed sword found in River Witham. Fourteenth century.

on at the moment of going into battle. It was succeeded in the last quarter of the thirteenth century by helms with rounded or pointed tops, sometimes with a movable visor, and occasionally with a broad rim. Towards the middle of this century exposed places, such as the joints at the elbows and knees, began to be covered by small plates (*coudières*, and *genouillières* or *poleynes*) of iron or *cuir bouilli*. About 1275 little wing-like appendages (*ailettes*), generally blazoned, were attached to the shoulders, and were destined to remain in use more than fifty years: about the same time *jambes* (shin-guards) of leather or metal were worn. Towards 1300 the principle of strengthening the mail by secondary defences of plate entered upon a wider development: the whole fourteenth century was in fact a period of transition and experiment in this direction. By degrees plates were added to defend the arms and feet, disks (*motons* or *besagues*) were fixed over the shoulder and elbow-joints, and gauntlets were introduced. The cumbrous helm was very largely superseded by a lighter helm called the *bascinet*, which was in general of a globular form terminating in a point, though admitting of many variations, especially in the shape of its movable visor. As it did not descend nearly so far as the helm, it became necessary to provide a new defence for the neck and shoulders, which was effected by attaching to its lower rim an appendage, something like a tippet, usually of mail, and known as the *camail*. In England, where visors were not always adopted, the helm was long retained and worn above the *bascinet*, which continued in use, with the *camail*, until the beginning of the fifteenth century: after that the *camail* became the standard of mail or collarette worn under a steel gorget to protect the throat, a defence which had been known some years earlier. After the fourteenth century the helm, almost obsolete in war, was still used in the joust, to which purpose the weight and shape were adjusted. It may be noted that the wide-brimmed steel hat is found throughout the

mediaeval period, appearing in the thirteenth century, and again in the fifteenth. Crests upon the helm were general in the fourteenth century.

Although plate additions were now so common, some knights appear to have long neglected them ; but towards the close of the fourteenth century breast-plates and corslets came into use, while laminated shoulder-pieces and elbow-guards were substituted for the earlier *motons* or *besagues*. The overlapping narrow plates attached to the lower part of the corslet, and forming, as it were,



FIG. 9.—Pommels of swords. Twelfth to sixteenth centuries.

a short metal skirt, were called in France *faudes*, and in England *taces*. From about the second quarter of the fourteenth century the feet were protected by *solerets* of articulated plates, pointed at the toes. During the transition period armour was often richly decorated with engraving. In the first half of the fifteenth century the change to complete plate-armour was accomplished ; modifications henceforward took the form of small additions to give greater local strength, and alterations were often little more than extravagances of fashion. With the sixteenth century, armour became more massive, and was often elaborately enriched and ornamented. The pointed *solerets* were superseded by broad-toed *sabatons* : plumes replaced the crests upon the helms. The

salade, a close metal cap covering the sides of the face and back of the neck, which had been introduced about 1400, and was the characteristic fifteenth-century type, continued to be worn in the sixteenth century (Italian example on shelf in the North Pier-Case adjoining the Franks Room): there is also a German example of a different type. The flexible coats made of small riveted plates concealed beneath a covering of stuff known as *brigundines* or *jazerine jackets* (in the same Case) are mostly of about the middle of the fifteenth century.

Jousting or Tilting Armour seems first to have been distinguished from war armour about 1400. It was, in general, heavier, extra pieces being added, especially on the left side, on which the combatants passed, and was often richly decorated. Early in the fifteenth century a barrier (*tilt*, French *toile*), at first a long cloth hung on a stout rope, afterwards a wooden partition, was set up to divide the lists, in order to ensure the observance of the rules of the joust. The chronicles of St. Remy and Monstrelet show that the tilt originated in Portugal, and was used as early as 1430 by the Burgundians. A fine suit of jousting armour may be seen in the Wallace Collection.

The use of fire-arms rendered armour ineffectual as a protection, and its use was gradually discontinued. After about 1600 buff leather was worn by the soldier, though breast- and back-plates and iron head-pieces were used throughout the century. By about 1700 the few pieces of armour which remained had become purely ornamental, and in this capacity they have survived to our own time in the uniforms of our Life Guards. The reintroduction of steel helmets in 1914-18 marked an interesting reversion to earlier usage.

The following brief notes concern individual parts of the equipment of knights and foot-soldiers in the Middle Ages.

In addition to the types of helmet mentioned above the following may be noted:

Armets, fitting closely round the lower part of the head, apparently originated in Italy, where they appear on a medal of about 1445-50, but they are not seen on effigies in England till the time of Henry VIII.

Burgonets, open helmets of Burgundian origin, worn mainly by light cavalry, were characterized by a brim over the eyes, a ridge-like 'comb' and the top, ear-flaps, and a *panache* (plume-holder); a face-guard (*buffe*) was sometimes used, strapped round the neck.

The *morion*, with upturned brim and comb, and the *cabasset*, with a projection on the apex, came in during the sixteenth century, and were worn by foot-soldiers.

Surcoats, &c. Throughout the greater part of the period a garment of woven stuff was worn over the armour, varying continually throughout the centuries. In the thirteenth century it was a long

surcoat with sleeves. This was replaced in England about 1325 by the *cyclas*, laced at the sides and much shorter in front than behind. This was a fashion of short duration, and by the middle of the century the surcoat falling to the knees was in common use. In the latter part of the century came in the short tight *jupon* without sleeves, almost always blazoned with arms, as on the tomb of the Black Prince at Canterbury. By the beginning of the fifteenth century the custom of wearing a textile garment over the armour had grown less usual, but down to about 1550 a very short surcoat called a *tabard* was worn in England.

Shields in Norman times were long, rounded at the top and pointed at the bottom ('kite-shaped'), being attached to the neck by a thong (*guige*). They were sometimes of iron, but usually wood covered with leather or *cuir bouilli*. But in the twelfth century they were already approximating to a shorter triangular form, though the surfaces were at first convex and the tops still rounded. By the first half of the fourteenth century shields were almost flat ('heater-shaped'), and straight along the top. Early in the fifteenth century the prowess of archers led to the introduction of a large convex, rectangular shield, called the *pavise* or *mantlet*, which rested on the ground and served as cover, protecting the whole person of the knight when on foot. With the perfection of plate-armour and the introduction of fire-arms, shields became obsolete. The so-called 'shields of parade', made of light materials painted and decorated, were only intended for display at tournaments. The example shown in fig. 10 is of the time of Edward IV.

Sword-belts, as already mentioned, were originally worn over the shoulder; but from the thirteenth century the sword was

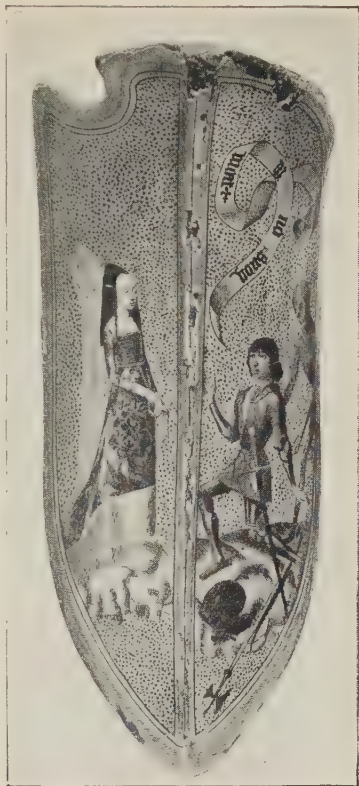


FIG. 10.—Shield of parade. French.
Fifteenth century.

attached to a baldric fastened to the right side of a belt worn round the waist and hanging obliquely over the left thigh. At the close of the fourteenth, and the beginning of the fifteenth century, belts were adorned with highly decorated clasps or buckles, and one of the ends hung down before the body as far as the knees.

Spurs (figs. 190, 191). The earliest spur was the straight prick-spur with a single point such as the Romans wore, and this was in general use down to the thirteenth century, when spurs with revolving rowels (*roulettes*, *molettes*) begin to occur. The latter type became predominant in the fourteenth century, though in the first half of it a few prick-spurs are still seen on English sepulchral monuments. At the end of the fourteenth century and during the greater part of the fifteenth, spurs were of exaggerated length, accompanying the *solerets* with very elongated toes. The reason for this lay in the use of a bulky horse-armour which rendered the flank inaccessible to a short spur. The enormous rowels with very long spikes belong to the sixteenth century, and were carried by the Spaniards to Central and South America, where the form still survives.

Horse-armour, which had been known in antiquity, was used in England from the thirteenth century down to the seventeenth. The pieces protecting the horse were generally known as *bardings*, and were of various materials from mail and *cuir bouilli*, often richly decorated, to plates of steel. When not of metal they commonly bore heraldic devices.

Swords throughout the mediæval period were straight and two-edged, with cross-hilts, though the form of the pommel varied with the centuries (figs. 5, 8, 9), being usually square, round, lozenge-shaped, or trefoil; in the thirteenth century the arms or badge of the owner often appear on the pommel, or the cross. The handle or scabbard is frequently decorated with ornamental metal-work set with gems. After the fifteenth century curved guards and basket-hilts came in with the practice of sword-play as a science.

Daggers were worn throughout the Middle Ages. The variety known in France from about 1200 as the *miséricorde* is constantly seen on English monuments from the earlier part of the fourteenth century.

The *mace*, a metal development of the club, was in common use through the Middle Ages. A very general form had a bladed or flanged head, and this was the type at first carried by the royal sergeants-at-arms. By degrees these maces became purely ceremonial and ornamental, the history of the civic mace beginning in the middle of the thirteenth century; the button at the lower end, which was engraved with the royal arms, became the larger and more important end, and by the close of the fifteenth century

was carried uppermost; the flanges, which formed an inconvenient handle, gradually disappeared. These maces were now always made of precious metal. The maces of civic sergeants-at-mace were copied from the royal maces, and in the thirteenth and fourteenth centuries were doubtless like those used in battle. None of these early examples have survived; but of the fifteenth century and later, when the button end had become all important, some five hundred remain. About 1650 the use of great civic maces increased, while a smaller number of sergeants' maces were made. There are some ninety great civic maces of the seventeenth and eighteenth centuries in existence in England.

Lances of tough wood with unbarbed iron points continued in favour through the Middle Ages. In the joust the points were



FIG. 11.—Archer's bracer of *cuir bouilli*. Temp. Henry VII.

blunted, or replaced by the *coronal* (trefoil button). To lances were attached the knight's swallow-tailed pennons. The rectangular banner was only carried by nobles and important persons.

Bows. The mediaeval bow, for the use of which the English archers and bow-makers became especially famous, was a 'self-bow', usually of yew, from $5\frac{1}{2}$ to 6 feet long, with arrows barbed at the points: it was effective at a range of about 250 yards. The short oriental weapon with counter-curves, and made of plates of horn and sinews glued together, was not favoured in the West. Its principle was, however, sometimes adopted in cross-bows. Wrist-guards (bracers) were worn to take the recoil of the bow-string (example, in Pier-Case, of decorated *cuir bouilli*, temp. Henry VII).

The *cross-bow* (fig. 7), though apparently known as early as the fourth century, and mentioned in tenth-century MSS., does not appear in general use until the twelfth century, and even then it was placed under an interdict as a barbarous weapon: it is not seen in the Bayeux tapestry. By the fourteenth century it was made of such strength that it had to be bent by various

mechanical appliances. The cross-bow fell into disuse after the invention of the arquebus.

Fire-arms. Cannon were first used in the fourteenth century. Before that time various forms of large mechanical catapults had been employed. A transition between the cannon and the hand-gun is seen in the portable culverins already in use in the fourteenth century. At the end of this century a rough form of hand-gun is found, an example of which is in the Museum at Nuremberg, and in the sixteenth century the matchlock arquebus appeared, to be quickly followed by the heavy musket, supported by a forked rest. The country of origin of the various gun-locks cannot be determined with certainty, since, during the first half of the century and earlier, Spain, Flanders, Italy, Germany, and Switzerland eagerly looked for and adopted new devices. In England, probably owing to the superiority and continued popularity of the long-bow, there is little mention of hand-guns before the Wars of the Roses. Towards the middle of the sixteenth century, the wheel-lock principle, in which the powder was ignited by a spark struck from a flint, was adopted in Germany. As a result, the pistol was soon afterwards invented (fig. 181).

Heraldry. The development of heraldry is far too wide a subject to be treated in a Guide of this nature, but a few simple facts illustrating the connexion of heraldic devices with knightly equipment may be inserted in this place. It has been conjectured that devices such as those upon the pennons borne by the Normans on the Bayeux embroidery may have influenced the charges on early shields of arms; we may note in this connexion the shields in the Lewis chessmen (fig. 56). Heraldic devices appear upon seals in the second quarter of the twelfth century (arms of Clare), and in England were well established in the early part of the thirteenth century; from that time armorial devices were continuously blazoned upon shields and pennons. The expression coat-of-arms is derived from the external garments of the nature of the surcoat or jupon worn above the armour, and shield-of-arms from the shield, on both of which the armorial insignia were displayed. The crest, as already stated, was originally associated with the helm, and was finally attached to a coronet or wreath encircling it. Crests were at first restricted to persons of high rank or importance. They rapidly multiplied in the fourteenth century, and were often of a very elaborate nature, being frequently constructed of *cuir bouilli* (see p. 57) or some light but durable material. The badge, a figure or device adopted as the cognizance of a person or a family, differed from the crest and from the charge upon a shield in having no connexion with either shield or helm.

In the thirteenth and fourteenth centuries the forms of heraldic shields usually followed those of shields actually in use in war.

With the Renaissance, other forms were adopted. In Italy a form in outline resembling a horse's chamfron was popular in the fifteenth century, while in Germany at the same period the blunt-based jousting-shield with curved sides and slit for the lance was freely used. Oval shields are very rare before the sixteenth century. The lozenge form was generally adopted by ladies as early as the thirteenth century.

ASTROLABES.

The Astrolabe is an instrument chiefly used for taking the altitude of the sun or stars in order to determine the time.

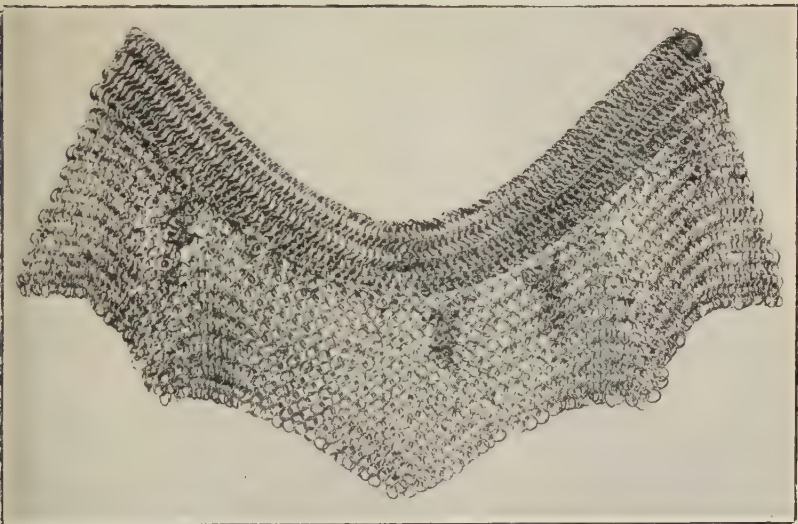


FIG. 12.—Standard, or collar of mail. Fifteenth century.

The name is derived from two Greek words ; and the astrolabe was well known to the Greeks, though under a form resembling that of the later armillary sphere, with separate rings for the Equator, Ecliptic, and other principal circles of the sphere. The earliest instrument of this kind was made by Hipparchus in the second century B.C., but Ptolemy, the geographer and astronomer of Alexandria (A. D. 140–160), reduced the astrolabe upon a plane surface, whence it was afterwards known as the planispheric astrolabe. This is a stereographic projection of the circles of the sphere upon the plane of one of the great circumferential lines, like

the Equator. The instrument was adopted and perfected by the Arabs, who introduced it into Europe about the tenth century, and have continued to use it down to modern times. Many of the finest and most ancient specimens are of oriental construction, and of these the Museum possesses more than one (examples in Pier-Case, Bay XV). Some of the most famous examples are preserved at Madrid and in Florence.

The planispheric astrolabe consists of a heavy circular metal plate with a ring at a point in the circumference, by which it can



FIG. 13.—Canterbury pilgrim's sign, with ampulla.

be suspended from the thumb. On the back are engraved a number of concentric circles, the outer always the same, the inner subject to variation in different instruments. Reading from the larger to the smaller, we find the first marked with the degrees into which the quadrant of a circle can be divided, then with the signs of the Zodiac, the days of the year, the names of the months and the days of each, and the Saints' days (in Christian astrolabes) with their Sunday letters. In the lower half of the space within these circles is a scale like a protractor, the horizontal limb of which is twice as long as the vertical limbs, and divided into twenty-four parts, while each vertical limb is divided into twelve parts: this is the scale of *umbra recta* and *umbra versa*, for taking the height of terrestrial objects. Through the centre of the back run two diameters crossing each other at right angles, the ends

marking the four points of the compass. The *front* is a sunk surface with a raised rim or border running round it, on which are engraved three circles, the outer with twenty-four letters representing the hours of the day, the two inner four series of ninety degrees each for the four quadrants. On the sunk central part of the plate (the 'moder' or 'mother') are engraved three circles for the tropics of Cancer and Capricorn and the Equinoctial, together with two diameters crossing each other at right angles, the ends marking the four cardinal points. In the same



FIG. 14.—Canterbury pilgrim's sign, with ampulla.

depression are usually fitted one or more circular plates or *tables*—sometimes as many as nine—differently marked for use in places situated in different latitudes. Each has engraved upon it, in stereographic projection on the plane of the Equator, the meridian line, the line of intersection of the Equinoctial with the plane of the horizon, the tropics of Cancer and Capricorn, the Equinoctial, circles of altitude from the horizon to the Zenith, circles of azimuth passing through the Zenith, and other circles. Above the tables fitted an openwork plate of varying design called the *rete* (net) representing a portion of the celestial sphere. It contains a small circle, the outer edge of which represents the Ecliptic, engraved with the months and days and with the signs of the Zodiac. From the interior and exterior of this circle issue branching limbs, having pointers on their extremities and sides, each marking the position of an important star. At the back of

the astrolabe, on the central pin holding all the parts together, revolved the *rule* (*alidade*), fitted with sights; on the front was the *label*, of somewhat different form.

When used, the astrolabe was suspended from the thumb by the ring in its edge, and altitudes were taken by the sights in the rule; the *rete*, tables, and circles of degrees served for various astronomical observations. By the *umbra versa* and *umbra recta* heights of objects upon the earth were determined, the former indicating the height in inches of the object for each foot of horizontal distance, the latter the height in feet for each inch of horizontal distance. The most important use of the astrolabe was at sea, and it was employed for nautical observations until the eighteenth century, when it was superseded by the reflecting quadrant and the sextant. Incidentally it served for telling the time of day, and is still used in the Mahommedan world for determining the hours of prayer and the position of Mecca. A most interesting account of the astrolabe will be found in Chaucer's works, where the poet describes the instrument for the benefit of his little son. Three English mediaeval astrolabes are included in the collection, one of the thirteenth and two of the fourteenth century, Plate II.

Examples with historical associations exhibited in Table-Case, Bay XVI, deserve attention: one, made by Humfrey Cole, in 1574, belonged to Henry, Prince of Wales. This is not of precious metal; but some made for royal persons were of gold or silver; an inventory of Henry V mentions examples in both metals. Those who are interested in astrolabes should not fail also to examine the collection in the Science Museum at South Kensington, where there is also a fine series of other early astronomical instruments. Astrolabes in the important Lewis Evans collection at Oxford, and in several Oxford colleges, have recently been published by Mr. R. T. Gunther.

BACKGAMMON. See p. 100.

BADGES AND SIGNS.

The badge is a device distinct from a crest, and having no necessary connexion either with the helm or shield. An individual or family might have more than one badge, but one of these was usually a well-known device worn by members of his household as a distinguishing mark, either worked upon their garments or applied to them. A few examples of the latter class are shown in Table-Case, Bay XVII, including the Bear and Ragged Staff borne by retainers of the Earls of Warwick, the Hound (talbot) of the Earls of Shrewsbury, and the 'Hart lodged' of King Richard II.

Among the most interesting badges are the pilgrims' signs



PLATE II. ENGLISH ASTROLABE, ABOUT 1260.

(*signacula*), usually of lead or white metal, distributed at the famous shrines to pilgrims, and worn by them on their hats and garments as a proof of their journey : the devices which they bore were such as obviously to suggest the saint or the shrine. The two most important places of pilgrimage in England were Canterbury (for the shrine of Thomas à Becket) and Walsingham



FIG. 15.—Pilgrim's sign : St. Thomas of Canterbury.

Priory in Norfolk, where Our Lady of Walsingham was venerated ; in France, Boulogne and Amiens were particularly frequented by our countrymen. Places of pilgrimage abounded in various parts of Europe, perhaps the most famous being the shrine of St. James at Compostella in Spain (p. 134), the sign of which was the scallop shell. The wearing of signs is mentioned in many early works, notably in Chaucer's *Canterbury Tales* and in Langland's *Vision of Piers Plowman* :

And hundreds of ampuls
On his hat setten,
Signs of Sinai
And shells of Galicie.

The collection contains a good series of pilgrims' signs, consisting either of medallions, plaques, brooches, ampullae (small flasks), &c., with designs in low relief, or actually taking the form of saints' attributes (selection in Table-Case, Bay XVII, figs. 13 to 15. Among the subjects are the figures of St. Thomas, and a bell (the Canterbury bell) from Canterbury, the Virgin and Child (Walsingham), Our Lady of Boulogne, the head of St. John the Baptist (Amiens), the Vernicle with the head of Christ (Genoa), the scallop shell (Compostella and Mont St. Michel), the horn of St. Hubert, the axe of St. Olave, the comb of St. Blaise, and



FIG. 16 —Stone mould for casting sign of St. Thomas of Canterbury, with impression taken from it.

others. With these is a stone mould for casting equestrian figures of St. Thomas (fig. 16). Another stone mould for casting signs was discovered at Walsingham, near the parish church. It is engraved on one side with a row of identical designs, each consisting of a circular band containing a six-pointed star in the centre of which is a medallion of the Annunciation: on the other side are two representations of the same design, each transfixed by a large arrow. Another mould (now in the Lynn Museum) was dredged from the Ouse at Lynn. It has on one side IHC, and on the other, three concentric circles transfixed by an arrow.

Pilgrims' signs seem to have first become general in the thirteenth century, and the majority date from the two centuries following. Some have been found near the shrines to which they refer, but the greater number have been dredged up from rivers,

especially the Thames and the Seine. The examples in the Museum chiefly come from the Roach Smith and Thomas Greg Collections, and were found in the Thames. A fine series from the Seine is in the Musée de Cluny at Paris.

The same case contains a later series of badges made of speculum metal, etched or engraved with figures of popular saints, especially St. Barbara, guardian against sudden death. These badges, which date from the close of the fifteenth and from the early sixteenth century, were perhaps worn on the hat as personal amulets, and thus belong to a class distinct from that of pilgrims' signs.



FIG. 17.—Lead and bronze forgeries.

The manufacture of a class of forged antiquities now well known in England, may have been first suggested by pilgrims' signs and badges (fig. 17). More than half a century ago, during excavations for a new dock at Shadwell, some two thousand metal objects were produced as discoveries made during the work. These ultimately proved to have been made by two illiterate, but ingenious, mud-rakers, whose moulds were discovered; and shortly afterwards the production of similar objects was continued by two men known as Billy and Charley living in Rosemary Lane on Tower Hill. The things were made of lead or of 'cock metal', an alloy of copper and lead, and took the form chiefly of medallions, but also of daggers,

vases, hollow figures representing ecclesiastics, triptychs, &c. The medallions bear figures and busts of kings, armed knights, &c., in low relief, surrounded by sham inscriptions including a date (often 1001 or 1021) in Arabic numerals. It is needless to point out that the kind of armour depicted does not accord with the period suggested, and that Arabic numerals were not employed for dates in the eleventh century (p. 203). These forgeries, which exist in great numbers and show an astonishing variety of types, are now very widely distributed over England, and are often actually excavated because they have been purposely placed in the earth.

BASCINETS. *See* p. 12.

BASINS. *See* p. 243.

BELTS. *See* p. 142.

BEZOAR STONES.

These are calcareous concretions impregnated with gallic acid formed in the stomach of various animals, the Persian wild goat, ibex, certain kinds of deer, monkeys, the llama of Peru and its congeners. The concretions vary in size, from that of a filbert or less to that of a hen's egg, are very lustrous, and, as an old writer (Monardes) said: 'compounded of certaine thinne skales one uppon an other, lyke to the skales of an onion'. The name is of Persian derivation, transmitted to the West through the Arabs. It means literally 'without poison', and so, counter-poison or antidote. It was believed that the creatures in whose stomachs these concretions formed had been bitten by serpents or scorpions, and that they had then eaten a sovereign herb: 'which having eaten they are presently cured, but the substance of the herb converteth itself into a medicinal stone' (Hawkins's account of the voyage of 1593). The range of efficacy was extended from specific cases of poisoning to every kind of disorder from indigestion to epilepsy, all being set down to the action of some venomous influence. Burton in his *Anatomy* even recommends it for low spirits: 'it hath an especial virtue against all melancholy affections'. A few grains of the bezoar were taken in water, either alone or with other substances. The high medicinal value ascribed to these objects naturally enhanced their value in money, and Sir Thomas Roe, writing in 1614, gives the price in England as three pounds an ounce, or more. The cost led to the production in the East of artificial stones, and various tests came to be applied that the purchaser might not be deceived.

Bezoar stones were often mounted in precious metal and worn round the neck; they are frequently mentioned in inventories and lists of jewels. Among the possessions of James I was 'one great Bezar stone sett in gould, which was Queen Elizabeth's'.

Belief in the medicinal value of the bezoar ceased in the West in the eighteenth century.

BOMBARDS. *See p. 156.*

BONE SKATES.

These implements were fastened to the instep and ankle with cords passing through holes at the ends of the bone in much the same manner as metal skates: but as they had no cutting edge,

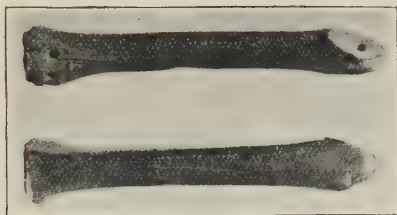


FIG. 18.—Bone skates.

the wearer was obliged to carry a stick shod with an iron point, by means of which he propelled himself forward: each skate was generally made from the tibia (leg-bone) of a horse.

Fitz-Stephen, writing in the time of Henry II (1154-89), describes the citizens of London as skating in this manner at Moorfields, where some of the examples in the Museum collection were discovered. Bone skates seem to have been very general in the north of Europe, and were still to be found in use down to comparatively modern times.

BOWS. *See p. 17.*

BOXWOOD MEDALLIONS AND CARVINGS IN HONESTONE.

Until about 1527 Germany did not follow the Italian example of casting portrait-medals to any great extent, and the fashion was practically unknown until 1510. Instead of medals intended to be mechanically multiplied, important and wealthy persons

in Germany had their portraits carved in pearwood, boxwood, or honestone (fig. 19). These works of art were not designed for reproduction, though sometimes used for that purpose, and the earlier examples are without inscriptions, which were added, if required, by means of letters applied by glue, or even impressed by the use of printers' type. Among well-known artists in boxwood and honestone were Schwarz, Hans Daucher, Ludwig Krug, Peter Flötner, and Friedrich Hagenauer. It is not probable



FIG. 19.—Honestone portrait of Joh. Klanmülher.
German. Sixteenth century.

that the honestone panels with Dürer's monogram (e. g. fig. 200) were actually executed by that artist.

BRASSES.

It is probable that in England, France, and the Low Countries brasses began to replace the older effigies during the first half of the thirteenth century. The earliest existing brass is at Verden in Hanover, to Bishop Iso von Woelpe, who died 1231, but the oldest surviving example in England is that of Sir John d'Abernon the elder, who died in 1277, and is buried in the church of Stoke d'Abernon, Surrey. England is now the only country in which brasses have been preserved in any great number. France lost hers in the sixteenth century and during the Revolution, and comparatively few remain in Flanders and Germany. German and Flemish brasses differed from our own in being usually formed from large plates of metal with a diapered background to throw the figures into relief: in England smaller figures, escut-

cheons, architectural canopies, and inscriptions were separately inlaid in large slabs of grey marble or other stone so as together to form one composition. The fine head of a bishop in the Pier-Case, Bay XIX (fig. 20), illustrates the continental style; while the small figures and shields are all derived from English tombs (fig. 21). Brasses are most numerous in the Eastern Counties, because in the Middle Ages this part of England had been greatly enriched by commerce: a certain number were doubtless imported from Flanders, but the majority were made at home. On the completion of a monument, the surface of the brass was burnished and the engraved portions commonly filled with a black or coloured composition. Examples of such filling in the collection are seen in the fragments of the canopy from the tomb of Peter de Lacy, from Northfleet, Kent, and the shield with the arms of Rickhill from the same place. In rare instances armorial shields have been ornamented with true enamel, as for example, the shield of Sir John d'Abernon mentioned above.

The so-called *palimpsests* are of two main classes: (1) brasses in which new dates and inscriptions have been given to old figures either left in their original state or modified; (2) brasses in which the plain reverse has been engraved with a new figure or inscription, the earlier figure on the other side being left undamaged except is so far as it may have been mutilated by the cutting up of the plate into smaller pieces. Mr. Mill Stephenson, who has catalogued the palimpsest brasses in England, would describe the first of these classes as appropriated and converted brasses; the second class he subdivides into wasters from the workshop, and spoils from the destruction of religious houses and chantries. To illustrate the anachronisms caused by the appropriation of brasses, the example at Bromham in Bedfordshire may be quoted, where a man in armour and his two wives in the costume of about the year 1430-40 have been re-named Sir John Dyve (d. 1535), his wife and mother. The second class is much the most numerous, and to it the various small examples in the Museum collection belong. Palimpsests due to mistakes on the part of the workmen, or to the dissatisfaction of the person ordering the monument, are frequently earlier than the Reformation, and in these the dates of the work on the two faces are not far removed from each other. On the other hand, in palimpsests which result from the re-use of much earlier monuments, the later surface is rarely earlier than the second half of the sixteenth century, and frequently much later. The majority of these palimpsests were due to the spoliation of the monasteries under Henry VIII in 1536-7, and the dissolution of the chantries, &c., in 1547. A great deal of brass was imported into England from the Low Countries, for brass plate does not seem to have been made at home until Elizabeth's time, and amongst the Flemish importations were many old brasses already engraved, probably

pillaged from churches in Flanders and Brabant during the religious troubles of the latter part of the sixteenth century.

Apart from their artistic merit and their historical importance,

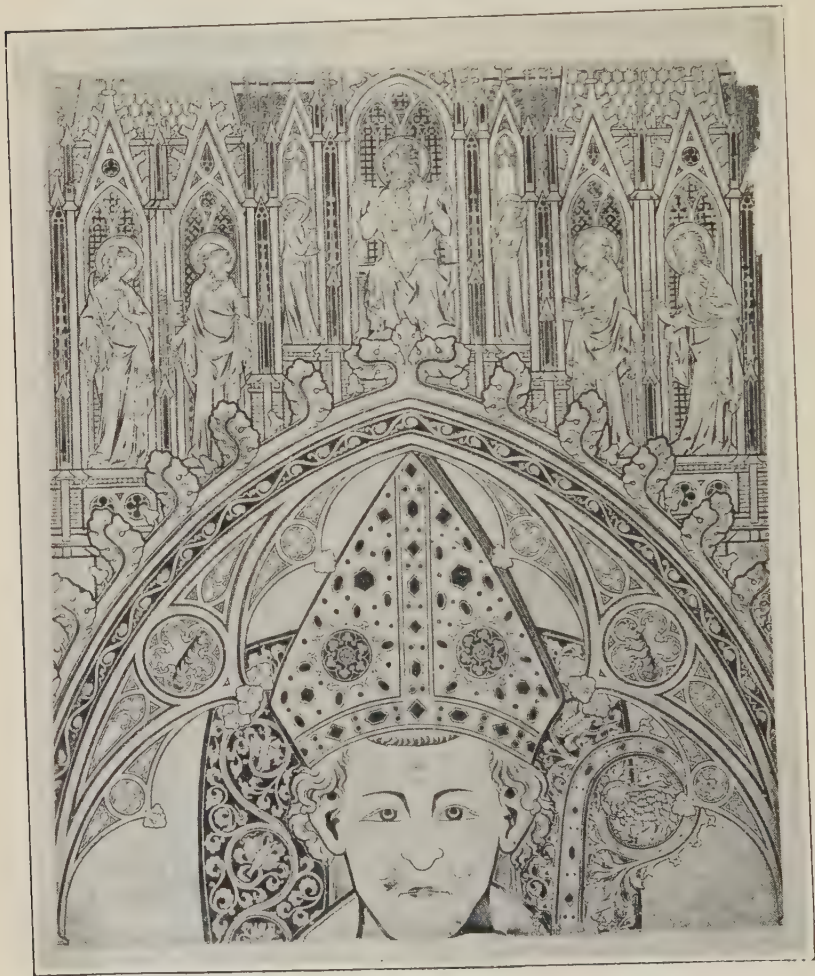


FIG. 20.—Monumental brass: head of a bishop. Flemish. Fourteenth century.

sepulchral brasses are of very great value for the study of the armour and costume of the classes able to afford such monuments. It is interesting to note that brasses have been reproduced since

the early part of the nineteenth century. At first regular prints were made with printing-ink, giving reversed results; a series of such prints made by Mr. Craven Ord and Sir John Cullum was presented to the Museum soon after Mr. Ord's death in 1830, and is now in the Department of Manuscripts. From these we may see how easily the process of printing might have been invented in the fourteenth century (p. 203), if it had struck a



FIG 21.—Fragment of a monumental brass: part of the figure of a man wearing a tabard with the arms of Fitzwilliam. About 1550.

brass-engraver to take proofs of his work as the niello-workers did at a later period in Italy. The easier and more satisfactory process of rubbing with heel-ball (a compound of beeswax, tallow, and lamp-black) has since been preferred, and innumerable rubbings so made are in existence. A fine classified collection, formed by the late Sir Wollaston Franks, is in the Library of the Society of Antiquaries at Burlington House.

BRUSHES. *See* p. 196.

BULLAE. *See* p. 173.

BUTTONS. *See* p. 144.

CABOCHONS. *See* p. 135.

CALENDARS (RUNIC) AND CLOG ALMANACKS.

These calendars, known in Norway as *Primstaves* (from *Prim*, the equivalent of the Golden Number), and in Denmark as *Rimstocks* (from *Rim*, a calendar, and *Stock*, a stick), take the forms of plain or sword-shaped staves, walking-sticks, oval rings, or tablets of wood or bone, on which the days of the year are represented by Runic characters, and feasts and days emblematic of the seasons by symbolic signs. The nineteen golden numbers for finding the full moon are also inscribed in their places; sometimes the signs of the Zodiac, the solar cycle, and the bissextiles are added. These staves vary in size from a few inches to nearly five feet. They are perpetual calendars, and were employed alike by literate and illiterate, remaining in use in parts of the Scandinavian area down to the early part of the nineteenth century. Their invention no doubt goes back to a very early time, but the oldest surviving examples are much later than the introduction of Christianity into the North in the tenth century, the Christians having at first condemned them as relics of pagan superstitions. The feasts which the symbols denote are those associated with the names of saints and sacred persons. Thus a sword marks the Conversion of St. Paul (Jan. 25); a cross, Holy Cross day (May 3); a gridiron, St. Lawrence's day (August 10); a goose, St. Martin's day (Nov. 11); a St. Andrew's cross, St. Andrew's day; and so on.

It will be remembered that the runic letters are developed, according to the more generally accepted theory, from the Latin alphabet, their angular character resulting from the nature of the hard medium (stone, wood, or metal) in which they were carved. The earliest known runes date from the fourth century, and their appearance upon the calendars of the seventeenth century is due to a survival, as they had long been replaced by another alphabet for common use. The later Scandinavian calendars are without runes, and therefore resemble the Staffordshire clog almanacks.

These almanacks were practically confined to the county of Staffordshire, and may be regarded as descendants of the runic calendars, though they were never inscribed with runes. In the English calendars the row of runes for the dominical letter placed to every day of the year is omitted, notches represent the days, and the golden numbers are inserted in Roman numerals. They consist as a rule of wooden staves of square section, along the edges of which the notches are engraved, Sundays being marked by a deeper notch than other days, and festivals indicated by the attribute of the saint to whom the day was dedicated, as in the case of their Scandinavian prototypes. The year and week are

always made to begin with a Sunday. The transition from the actual runic calendar to the clog almanack is not precisely defined, but the earliest clogs go back to the last quarter of the sixteenth century. They are now obsolete.

CAMAIL. *See* p. 12.

CAMEOS. *See* p. 106.

CANDLESTICKS.

Though the pricket continued to be used to a late period, especially in churches, the portable candlestick with a handle and socket had been known from Roman times. Socketed candlesticks,



FIG. 22.—Enamelled pricket candlesticks. Limoges. Twelfth and thirteenth centuries.

which became the general form, were certainly used in the fourteenth century, and a fine example was exhibited at a meeting of the Society of Antiquaries of London in 1872. Candlesticks were placed on the altar as early as the thirteenth century, usually two only, except on feast days. Examples in the precious metals do not seem to have been commonly made in England before the time of Charles II, but Henry III presented silver ones to Westminster



FIG. 23.--Bronze gilt censer-top. Twelfth century.

Abbey. Enamelled candlesticks, chiefly of the pricket form, were among the stock productions of Limoges from the close of the thirteenth century.

CAUDLE CUPS. *See* p. 68.

CENSERS (THURIBLES) and INCENSE VESSELS.

Incense was adopted by the Church from pagan sources; the monuments show that censers were used from the fifth century. There is little reason to doubt that their first employment was

even earlier, and that Constantine may really have presented censers to the Lateran, as stated in the *Liber Pontificalis* or Papal Chronicle. The mosaics of S. Vitale at Ravenna (sixth century) show cylindrical censers with feet, suspended by three chains; these are without covers, as was usual, but not universal in the case of Early Christian and Byzantine examples. (Cf. *Guide to Early Christian and Byzantine Antiquities*, 2nd ed. 1921, p. 113, fig. 68.) In the West, down to the tenth or eleventh century the censer was generally simple in outline, sometimes spherical, sometimes with human or animal figures, or foliate or conventional ornament, pierced to allow the escape of the smoke; from this period, as



FIG. 24.—Incense-boat. Fifteenth century.

we learn from Theophilus (p. 182), architectural features begin to appear; a fine censer cover (fig. 23) is exhibited in the lower part of Pier-Case, Bay XVIII, B.

This architectural fashion continued through the Middle Ages, the forms varying with the Gothic styles, and in the fifteenth century becoming exceedingly elaborate, with finely designed traceries reproducing those of contemporary windows. The idea underlying these developments was the representation of the Heavenly Jerusalem, the details of the vessel and the incense burned in it having a symbolical significance. It is an interesting point that some of the earliest architectural censers were made in this country. The top of a censer fashioned to resemble the tower of a late Saxon church is of the twelfth century or possibly earlier (fig. 123); it was found in the Thames near London Bridge (Pier-

Case. Bay XIX. E). Many censers used in royal Chapels and in Cathedrals were made of gold and silver; monastery churches are also recorded to have used gold censers. But the early examples of these have mostly disappeared, an exception being the admirable silver gilt example of the fourteenth century from Ramsey Abbey, now in the Victoria and Albert Museum.

Vessels for containing incense were commonly described as boats or 'little ships' (*navettes*); they probably derived their form from the ship or boat, which was one of the earliest symbols of the Church (*Guide to Early Christian Antiquities*, 2nd edition, p. 77), though in most cases the resemblance is at best a distant one (fig. 24). No certain examples of vessels for containing incense are known in art before the eleventh century, when a miniature shows an angel carrying a censer and a small vessel in the shape of a bowl or basin. Possibly the earliest form may have been cylindrical, as the pagan Romans used cylindrical pyxes (*acerrae*) for their incense. At the end of the twelfth century, sculptures show angels carrying *navettes* of the boat-shaped type, but without covers. In the sixteenth century the vessel sometimes assumed a far closer resemblance to a ship, thus approximating, though on a small scale, to the *nefs* or larger vessels which were placed before great personages at the banquet to contain their table utensils.

Incense was conveyed from the *navette* to the censer by means of a spoon. It is not known when these spoons first came into use; an inventory of the Cathedral of Angers (1297) includes two incense-spoons, and in the sixteenth century they are often mentioned with *navettes*. The Waddesdon Bequest contains a fine Flemish example (No. 209) of about 1480.

CHAINS. See p. 145.

CHALICES AND PATENS.

The word *chalice* is derived from the Latin *calix*, the cup-shaped envelope of the flower.

Early Christian chalices were of two types, one with two handles like the ancient *cantharus*, the other without handles but with knop and high foot (cf. *Guide to Early Christian and Byzantine Antiquities*, 2nd ed. 1921, p. 106). Both types survived to the Middle Ages. The example from Trewhiddle, near St. Austell, dating from the time of Alfred (*Guide to Anglo-Saxon Antiquities*, 1923, p. 99), illustrates the second type at a period of transition. In the tenth and eleventh centuries both types are found. That with handles lasted until the thirteenth century; a large gemmed example was given to Westminster Abbey by Henry III, and another, ascribed to the middle of the century, is in the Monastery of Marienstern near Kamenz. The bowl in the earlier mediaeval

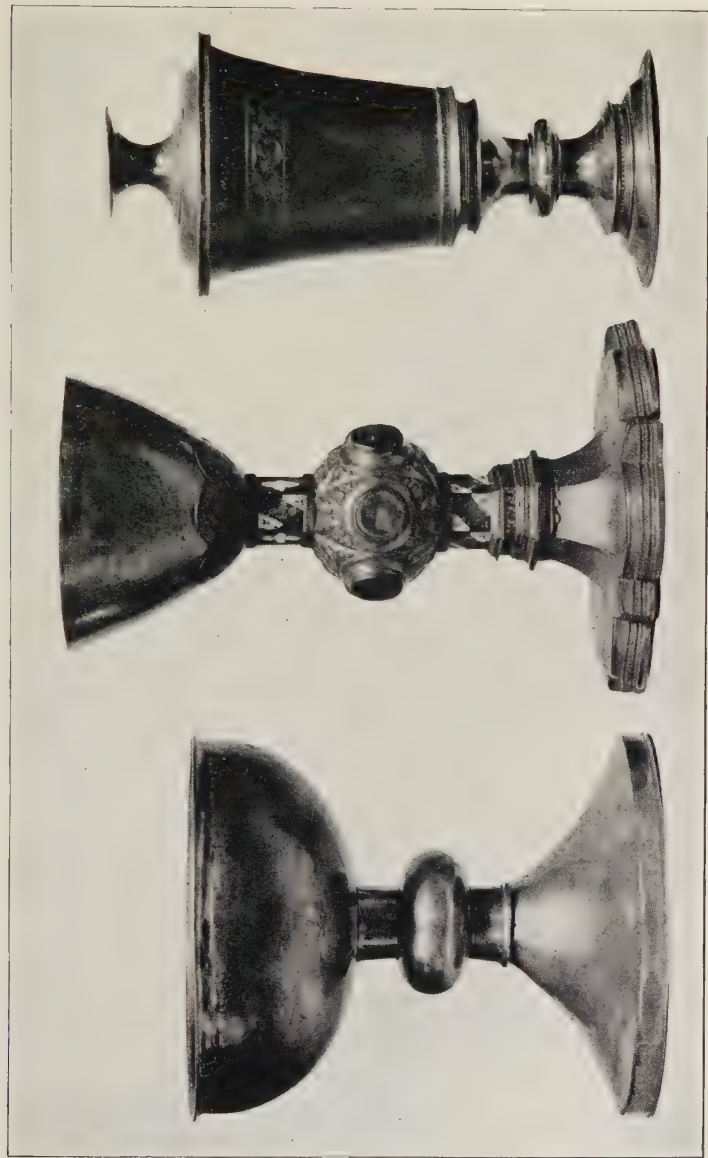


PLATE III.

ENGLISH CHALICE,
THIRTEENTH CENTURY.

SIENEZE CHALICE,
FIFTEENTH CENTURY.

ENGLISH COMMUNION CUP,
MADE ABOUT 1570.

chalices was hemispherical, the stem short, the knops round, the foot circular and widely expanded, and this continued into the thirteenth century (chalice from Berwick St. James, Wiltshire, in the Franks Room, Case C; see plate III); but in Italy, even before the fourteenth century, the stem lengthened and the bowl became more conical. At the same time the stem and knop tended to become prismatic, while the foot was made angular or divided into lobes. The earliest examples of such changes belong to Siena; a chalice at Assisi, made before 1290 by a Sienese artist, already shows them. North of the Alps, the round-footed type with hemispherical bowl lasted till after the middle of the fourteenth century. From the sixteenth



FIG. 25.—Funeral chalice and paten. From Old Sarum. Thirteenth century.

century, chalices with very elaborate ornamentation were made, some of the most sumptuous being produced in Spain and Portugal. Byzantine chalices, of which there are numerous examples of the eleventh and twelfth centuries in the Treasury of St. Mark's at Venice, were sometimes very large (*Guide to Early Christian Antiquities*, as above, pp. 108, 172): they are found both with and without handles, many being of crystal and agate or other stones, with metal mounts. A silver chalice of the Earlier Byzantine period without handles and inscribed with a dedication is exhibited in the Christian Room (Wall-Case 6).

In England, after the Reformation, the Communion-cup replaced the chalice. The earliest examples date from the reign of Edward VI, but most are of the time of Elizabeth. All are very similar, the bowl being high and beaker-shaped, and the small paten when reversed forming a cover of which the low foot serves

as a handle (*see* examples in Pier-Case, Bay XVIII ; and plate III): this form of cup was in many instances continued down to the Commonwealth. In the thirteenth and fourteenth centuries chalices and patens of silver, or more generally white metal, were often buried with ecclesiastics, and usually placed over the breast (examples in Pier-Case, Bay XVIII ; fig. 25). Their appearance is explained by such constitutions as that of William de Blois, Bishop of Winchester (1229 or 1230), ordering an unconsecrated chalice of tin or base metal to be provided in every church of the diocese for burial with the parish priests. On some sepulchral brasses, as at North Mimms, Wensley, and Higham Ferrers, the chalice is represented in this position.

In the early Church, chalices of glass and even of wood and horn had been used, bronze more rarely, and chiefly in Ireland. But the precious metals had almost from the first been the usual material, and their use was prescribed in the Early Mediaeval period, pewter being only allowed in the case of poor communities.

From at any rate the ninth century down to Romanesque times a tube (*calamus, canna, fistula, &c.* : Fr. *chalumeau*) was often used with the chalice ; thus in the inventory of gifts to Exeter Cathedral by Bishop Jæofric about 1046, mention is made of 'a silfrene pipe' with chalices. The *calamus* survived until comparatively modern times at certain places—e. g. the Monasteries of Cluny and St. Denis—and it is still used by the Pope. The spoon is not known to have been used in the West with the chalice, as it was in the East. Where spoons are mentioned in inventories, they accompany patens upon which they served to place the bread.

The *paten* has almost always assumed the form of a shallow circular plate or disk ; but the Merovingian paten from Gourdon, in the Cabinet des Médailles at Paris, dating from the seventh century, is rectangular, and we read even of octagonal examples in the early Middle Ages (*Guide to Early Christian and Byzantine Antiquities*, 2nd ed., p. 110). The patens represented in Carolingian miniatures appear to have been hardly more than plain disks, but the *Liber Pontificalis* mentions examples of the ninth century decorated, like that from Gourdon, with precious stones. Byzantine patens in the Treasure of St. Mark's at Venice are enriched with gems and enamelled plaques, and, like chalices accompanying them, are sometimes made of alabaster and agate. Patens once belonging to Westminster Abbey were also gemmed, as we know from inventories.

It was in the ninth century that figures, usually the head of Our Lord (the Vernicle), began to be engraved upon patens. The custom of developing the depressed centre with a series of lobes may have begun even earlier, though the paten of St. Gauzelin, Bishop of Toul, in the Cathedral of Nancy (tenth century), is one of the oldest surviving examples. Such lobes henceforward

became a permanent feature, and it is conjectured that at first they may have been adopted to facilitate the arrangement of the wafers, though a symbolic meaning has been attached to them. English patens of the pre-Reformation period are more numerous than chalices of the same date, about a hundred being known; most of them are with chalices for which they were not made. Among the earliest is one in the church of Wyke near Winchester, which must date from about 1280.

CHEFS.

The term *chef* was used for a reliquary in the form of a head or bust, in which a saint's head, or part of it, was enclosed. It was usually covered with beaten silver, enriched with gems, and sometimes with applied plaques of enamel. The finest examples date from the thirteenth to the fifteenth century, the churches of France being especially rich (St. Ferréol, at Nexon, dated 1346; St. Martin, at Soudeilles: St. Yrieix at the place of that name, and others). Those once in England have been destroyed at various times during or before the Reformation; though what appears to be a bronze head-reliquary of the fifteenth century, found at Wapping, is in the Guildhall Museum. The best known of English chefs was that enclosing the head of St. Hugh at Lincoln, which was carried off and destroyed by church robbers in 1364, remade soon afterwards, but again destroyed in the first half of the sixteenth century.

The fine example in the Pier-Case, Bay XVIII (plate X) was formerly in Basle Cathedral.

CHESH. See p. 98.

CHRISMATORIES.

The chrismatory is a receptacle for the three oils: *chrisma*, or *sanctum chrisma*, composed of balm and olive oil; *oleum catechumenorum*, or oil of the catechumens; *oleum infirmorum*, or oil of the sick; it therefore has three compartments, though all may rest upon a single stem. Chrismatories of some form or other were evidently known in the early centuries of Christianity, though at first each may only have contained a single oil; it is forbidden to place the three oils in a single vessel except in three distinct compartments.

The shape and material of chrismatories varied in the later Middle Ages. The inventories mention many of silver gilt: one such, described as Bishop Gilbert's, occurs in the inventory of St. Paul's Cathedral, 1295. In England the old chrismatories in precious metal have been destroyed, though mediæval examples

of brass and pewter have been found in repairing the churches of Granborough, Bucks., and St. Martin's, Canterbury. The second of these is in the form of a rectangular box, having a gabled roof with pierced cresting; in the interior are the fragments of three small pots for the oils.



FIG. 26.—Gilt copper chrismatory. Late twelfth century.

A fine gilt copper chrismatory on a high stem, Rhenish, about 1200 (Borradaile Bequest), is shown in the upright central portion of Table-Case 2 (fig. 26).

CIBORIA.

The *ciborium* was, in the Early Christian Church, a canopy above the altar (*Guide to the Early Christian Antiquities*, 2nd

edition, pp. 102, 103, and fig. 63) : it was supported by columns, between which curtains were sometimes drawn, and from which a vessel containing the reserved sacrament was sometimes suspended. In the Greek Church a miniature canopy is still used, the columns resting on the top of the altar. From about the tenth century the word *ciborium* denoted the vessel in which the reserved sacrament was kept. In Romanesque and even earlier times this was often a metal dove suspended above the altar ; from the thirteenth century it generally took a form resembling that of a chalice with a lid, both bowl and lid being approximately hemispherical, the latter often surmounted by a cross : this form has continued until the present day. Ciboria of this kind, which became numerous in the fourteenth century, were kept for safety at first in niches by the altar, then in tabernacles of elaborate construction. In the Pier-Case, Bay XIX, E, is seen the lower part of a fine enamelled ciborium, in style resembling that in the Louvre signed by G. Alpais ; in the Table-Case in the same Bay is the bowl of another ciborium which has lost its enamel, but is admirable in design.

CLOCKS AND WATCHES.

The earliest clocks worked by means of weights, and at whatever date they may have been invented, were certainly in existence in the fourteenth century. But these were large timepieces set up in churches and monasteries, and need not be discussed in connexion with the chamber-clocks and watches, which alone form part of the Museum collection. The works of two large mediaeval clocks of the fourteenth century, one from Wells, the other from Dover Castle, may be seen in the Science Museum at South Kensington.

In order to make a timepiece portable, it was necessary to provide some less cumbrous motor than heavy driving-weights suspended on cords or chains. Such a substitute was the mainspring, or a steel ribbon coiled round a central spindle or arbor, first employed by Peter Henlein or Hele, a Nuremberg clock-maker at the beginning of the sixteenth century. The new invention made small clocks possible ; and from this period down to about 1570 table-clocks were produced for the use of wealthy persons, with cylindrical or rectangular cases of gilt bronze or brass, ornamented with incised designs. They were chiefly horizontal, the face being upon the top (fig. 27) ; and the numbers upon the dial were usually seen through perforations in the cover. Glass is occasionally seen covering the faces of table-clocks as early as the latter part of the sixteenth century. Some of these clocks were soon made small enough to be carried on the person, and are known as clock-watches (examples in Table-Case,

Bay XIV, and Pier-Case, E). The cases of these early instruments were often made in openwork in order that the bell with which they were commonly provided, sometimes for the striking of the hours, sometimes as an alarm, might be more readily heard. It may be noted that the word 'clock', whatever its derivation, signifies a bell, and it is thought that an early device was to sound the hours by striking a bell, the time for striking being ascertained by means of a sun-dial or hour-glass. The term 'watch', when it came in, had not the special significance which it now bears, and 'watch', 'clock', or 'orologe', apparently meant no more than 'timepiece'.

Table-clocks and watches of the sixteenth century are com-

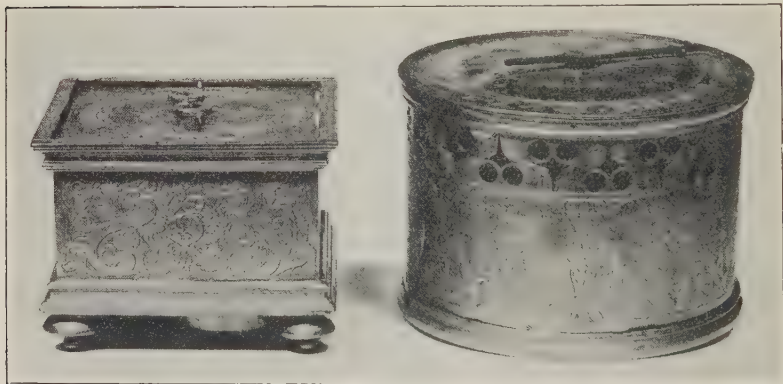


FIG. 27.—Horizontal striking-clocks. German. Sixteenth century.

paratively rare, and most of them are of German origin, though the manufacture had soon extended into France and the Low Countries. With the approach of the seventeenth century, the simple and low models were superseded by cases of taller form, some of elaborate architectonic designs with ornamental plinths and columns, and frequently embellished with statuettes. The fine standing clock made by Isaac Habrecht in 1589 on the model of the clock in the Cathedral at Strasbourg (*see below*, p. 296, and fig. 28) is a conspicuous example. Even at this early date fanciful forms appear, such as the 'nef' or ship-clock by Hanns Schlott, made in 1580 (Franks Room, Case B): the form in this case was probably suggested by the nefs of contemporary plate (*see* p. 66; and Franks Room, Case D). Some of these clocks have several independent dials, marking not only the hours of the day, but the day of the month, the phases of the moon, the signs of the zodiac, and even the courses of the planets. Most of them have



FIG. 28.—Great clock by Isaac Habrecht. 1589 (p. 296).

only an hour-hand, but the minute-hand appears in rare examples in the last quarter of the century. It may be stated here that the minute-hand was only gradually recognized, the reading of two hands simultaneously being at first thought more difficult: in England it was not common upon clocks before 1670, and was often omitted by provincial clockmakers quite late in the eighteenth century. In the seventeenth century the elaborate forms were continued, and the clocks were usually raised upon feet. As the century advanced, the German clockmakers of Augsburg and Nuremberg associated with the dials of their timepieces human and animal figures dominating the whole design, and often moving automatically at the striking of the hour; in the manufacture of these clocks we observe the same fanciful turn of mind which produced the contemporary cups exhibited in the Waddesdon and Franks Bequests. The clocks shown in fig. 166, in which negro figures point the hours upon a revolving globe, illustrate the style of work in favour at this time. In France, the cases of clocks from the latter part of the seventeenth century were decorated in the style of Louis XIV; and Caffieri, Boulle, and Marot frequently designed and ornamented them. During the eighteenth and nineteenth centuries, French clocks were made in the changing styles which characterize the furniture of the periods of Louis XV, the Regency, Louis XVI, and the Empire (examples in the Wallace Collection, and the Jones Collection at South Kensington). In England, where chamber-clocks began to be generally made about 1600, the first common form was a wall-clock with driving-weights and a balance, the pendulum not coming in until the middle of the seventeenth century. Many of the smaller English domestic clocks from the time of Elizabeth to about the eighteenth century were of brass, with the bell at the top, and ornamented above the dial with openwork brass frets, in which shields, vases, and dolphins were prominent motives: the dolphins, an especially favourite design, came into use about 1640. They are known as lantern-clocks (examples in Pier-Case, Bay XIV, E, F). Finely decorated bracket-clocks, with wooden cases enriched with gilt metal mounts, were also made from the second half of the seventeenth century. The clocks with long cases, familiarly known as Grandfathers' clocks, were probably introduced between 1660 and 1670, and the earliest examples were comparatively small. Arched tops appear to have been added to the dials early in the eighteenth century. As in France, the style of the best furniture-designers was adopted for clock-cases, and Chippendale and Sheraton have left such examples of their work.

The luxurious taste and love of curious devices which characterized the second half of the sixteenth century demanded more original designs than the simple circular form of the earliest

watches. The watchmakers of Southern Germany and of France produced small watches in a great variety of forms, their cases being often sumptuously decorated with chasing and enamels, or formed of rock-crystal plates. The collection contains several



FIG. 29.—Clock by Bartholomew Newsam. About 1500.

examples of this time, shaped as books, flowers, skulls, crosses, and even animals. These watches were no doubt at first imported into England, where there seems to be no evidence of manufacture before the end of the sixteenth century. About this time watches were sometimes mounted upon pillars or pedestals: a fine example by Nicolaus Rugendas of Augsburg, probably dating from about

1610, is exhibited in Table-Case, Bay XIV. From the close of the sixteenth to the close of the seventeenth century, octagonal watches, the cases frequently in great part of crystal, were in favour (fig. 30). Oval watches, probably first made at Nuremberg about 1600, were also general in the first part of the seventeenth century. Circular watches were in use at the same time.

About 1630, watches, which had hitherto been suspended from the neck or waist, came to be carried in the fob or pocket when worn on the person, though ladies continued to wear them hung from châtelines till the latter part of the eighteenth century. One of the small English watches in the collection, traditionally



FIG. 30.—Watches of the sixteenth and seventeenth centuries. To left : German, Augsburg, about 1530 ; to right : German, about 1550 ; in the middle : English watch by John Wright, about 1620.

associated with Oliver Cromwell, has attached to it one of the earliest fob-chains in existence. It was not until about 1610 that watches were furnished with protecting glasses : these were at first thick and flat ; afterwards, highly convex and cut from spheres. Later, the bull's-eye glass with flat centre was introduced from Germany, to be succeeded by the slightly convex 'lunette' from France, and the thick crystal glass in use at the present day. Outer cases, rendered necessary by the elaborate ornamentation of watch-backs with enamels and gems, became general from about 1640, and continued in use until the beginning of the nineteenth century. These were of metal engraved, chased, or embossed ; of leather piqué with gold or silver pins ; shagreen ; tortoiseshell ; horn and other materials, sometimes wood or precious stones.

In very early portable timepieces the numbers were usually engraved upon a separate metal band placed upon the dial, though in some cases the figures were incised in the dial-plate; but from about 1600 a single plate, generally of silver, was used on watches, the centre commonly engraved with landscapes and other designs. In England after the middle of the seventeenth century, gold dials with the figures in relief were frequent, the earliest having a single brass hand, but the figures were painted on enamelled faces. With the appearance of the minute-hand in the last quarter of the seventeenth century, the numbers of the minutes were placed in a circle outside that of the hours, but this arrangement was discarded in England towards the middle of the eighteenth century, though retained rather longer in France and possibly in Switzerland. Plain white enamel dials seem to have been introduced in these two countries about 1690, and appeared in England about a dozen years later. But many French watches of the late seventeenth and early eighteenth centuries have brass dials with added enamel disks for the hours. Second-hands are not usually found on watch-dials until after 1760.

Large travelling-watches, often with an alarm or, later, a repeating mechanism, and generally with pierced cases to let the bell be heard, were made from the latter part of the seventeenth century until railways made an end of long coach journeys; they chiefly come from France and Germany.

From the middle of the seventeenth to the end of the eighteenth century, watch-keys of fine workmanship are found, usually with ornamental handles, and often with a crank action for winding the watch. These were followed by the more familiar type with a circular ring handle.

The most famous of the early British makers were Bartholomew Newsam, probably working in London before 1568, watchmaker to Queen Elizabeth (clock in Pier-Case, Bay XIV, E, fig. 29), and David Ramsay of Scotland (1600-50), maker to James I and Charles I, introduced as a character in *The Fortunes of Nigel*, who probably studied French methods. Other distinguished names are those of Edward East (1610-73), successor of Ramsay as watchmaker to Charles I, Thomas Tompion (1638-1713), clock- and watchmaker to Charles II (clock in Pier-Case, Bay XIV), to whom several important inventions are due, George Graham (1673-1751), long associated with Tompion, and buried, like him, in Westminster Abbey, Daniel Quare (1648-1724), inventor of the repeating-watch, Thomas Mudge (1715-94), inventor of the lever escapement, John Arnold (1736-99), and Thomas Earnshaw (1749-1829), both of whom effected improvements in the chronometer. British watchmakers have throughout held a most honourable place in the history of horological invention.

The *motive power* of the ordinary clock is furnished by a weight, which, falling gradually, revolves a spindle round which is coiled the cord suspending it. This spindle is connected by cogs or teeth with toothed wheels, which control the hands revolving round the dial. In an ordinary dial the hour-hand makes only one revolution while the minute-hand makes twelve, and the relation of the toothing of the wheels connecting the two hands must therefore be in the same ratio: e. g. as 8 is to 96.

The *regulation* of this mechanism is furnished by a balance or a pendulum. If the weight had uncontrolled power to follow



FIG. 31.—Watch with enamelled case, by B. Foucher of Blois, 1630–40.

the laws of gravity, it would fall to the full length of the suspending cord just as quickly as the resistance of the intervening wheels would allow. Hence some regulating mechanism is needed. Between the balance (or the pendulum) and the train of wheels is interposed an 'escapement'. The earliest form of this device acts in the following way. The balance is a weighted bar (or a wheel) which revolves backwards and forwards, imparting similar motions to a spindle passing through its centre; from this spindle project two flanges (pallets) which engage teeth on the face of a wheel or short cylinder. Of these two flanges one imparts an impulse to the balance, while the other checks its too rapid progress, thus regulating the fall of the weight and the resulting motion of the train of wheels. By a careful adjustment of the relation of the wheels and by an infinite variety of devices in the escapement, the

accurate registering of the hour by the hands on the dial has in course of time been attained. The pendulum, invented in the seventeenth century, was found capable of greater accuracy than the balance, from the fact that the regularity of the beat of a pendulum is roughly in a constant ratio to its length. Near the upper (or fixed) end of the pendulum is applied an arrangement similar to the two pallets acting on the escapement wheel, as described for the balance. In watches (and in table-clocks) the motive power is produced by a spring which, being closely coiled in a box or drum, drives the train of wheels by the force exerted in the natural process of uncoiling.

To regulate this process various expedients were tried, notably the 'stackfreed'. In this appliance a pinion was connected with the drum, engaging with a toothed wheel, which was controlled, as if by a brake, by a roller at the end of a curved spring. The stackfreed lasted till about 1540, and is occasionally found later, but was generally superseded by the pyramidal 'fusee', a device invented by Jacob Zech of Prague, in 1525. This was connected with the drum by a chain which replaced the earlier catgut, probably about 1650; the winding of this chain coils up the spring to its highest tension. The purpose of the fusee is to equalize the driving power of the spring, which naturally exerts more force when freshly coiled than when it is nearly relaxed; the pyramidal form of the fusee is carefully adjusted so as to compensate the greater or less strength of the spring. The driving power of the spring, thus controlled, passes through the wheels to the escapement, which in its turn controls the pace of the whole movement, in the same way as is stated above in describing a clock escapement.

CLOG ALMANACKS. *See* p. 32.

COCO-NUT CUPS. *See* p. 64.

COMBS. *See* p. 118.

COMMUNION-CUPS. *See* p. 37.

COMPASS, MARINER'S.

The old belief that the mariner's compass was invented by the Chinese is now discredited, and the question of origin remains obscure. The Arabs trading in the Levant employed the 'floating compass', in which a magnetized piece of iron floated on a small raft of cork or reed in a bowl of water. Though in the twelfth century Alexander Neckam mentions the mariner's compass, the first certain description of a compass with needle moving on a pivot occurs in the *Epistola de magnete* of Petrus Peregrinus de Maricourt, written in 1269, before which time the Italian sailors seem to have used a floating compass like the Arabs. The pointing of the needle to the pole star is used as a simile by Dante (*Par.* xii. 28-30).

The naming of the eight principal winds is older than the compass, being found in the Temple of the Winds at Athens. But the so-called 'rose of the winds' in which they are set out upon lines radiating from the centre to the circumference of a circle, occurs in navigators' charts of Genoese, Venetian, and Spanish origin early in the fourteenth century. At the end of

that century the full thirty-two points of the rose were known to Chaucer, who mentions them in his treatise on the astrolabe, written in 1391. According to the late Professor Sylvanus P. Thomson, the card with the rose was first fixed at the bottom of the box by the compass-makers of Nuremberg in the sixteenth century, and by Stevinus of Bruges about 1600. It may be noted that the *fleur-de-lys* marking the N. upon compass cards is held by the same authority to have developed from an older broad arrow or spear-head, in combination with the letter T, standing for *Tramontanà*, the Italian word for the north wind. The above paragraphs refer only to the old compasses, or those still used in modern times for ordinary purposes. The modern mariner's compass used on ships is much more elaborate and does not depend upon a single needle.

As would naturally be inferred from the above, the compasses exhibited in the Pier-Case, and Table-Case, Bay XIV, are in no case earlier than the latter part of the sixteenth century.

COSTUME.

The subject of mediaeval civilian dress does not directly come within the scope of this Guide, for there is no collection of costumes in the mediaeval section. But it is desirable to draw attention to a few important stages of development in dress, as many of the objects in the cases, notably seals and monumental brasses, have upon them figures wearing contemporary costume. Two points may be noted by way of preface: the first, that apostles and sacred persons are clothed not in the dress of the artists' times, but in that of the early Christian age (cf. *Guide to Early Christian Antiquities*, second edition, pp. 89-91), or in the nearest approach to it of which the artists were capable; the second, that the dress of the working classes remains very similar from beginning to end of the Middle Ages. The costume of the poor man always consisted of a girded tunic reaching nearly to the knees, a tight covering for the legs, and some kind of cloak or mantle for cold weather: in the same way poor women wore a simple dress of such a kind as to leave the limbs as far as possible unencumbered when working. There was naturally slight variation from century to century, but no fundamental change. Since it was only in the garments of the wealthier classes and the manner of wearing them that fashion caused comprehensive alterations, it is with these that the following remarks are chiefly concerned.

In the Carolingian period, with which the Middle Ages may be taken to begin, costume was still obviously based upon late-Roman models. The men wore two tunics, of which the inner had long, close sleeves and was confined at the waist by a belt; to

protect the lower limbs they had very short breeches and high stockings, sometimes with crossed garters, or else long breeches fitting very close; a mantle resembling the chlamys was fastened by a brooch over the right shoulder; the costume of women bore a general resemblance to that of the men; the hair was concealed under a cloth head-dress. The ivory carvings in Table-Case, Bay XX, and the Crystal of Lothair in Table-Case 2, afford illustrations of these fashions.

From the close of the eleventh century a great change took place, possibly in part due to the oriental influence which came in



FIG. 32.—Detail from enamelled casket.
Limoges. End of twelfth century.

during and after the Crusades. Both the tunics and the mantles of noble persons now often reached almost to the ankles, as may be seen from the statues on the Cathedral of Chartres (about 1140); and in contemporary female costume we also note very long garments of fine material falling into numerous folds. The dresses of ladies were high at the throat, and their mantles fastened not upon the shoulder, like those of the men, but across the breast, usually by means of a cord. At the end of the twelfth century there began a movement in the contrary direction, and in the thirteenth century garments were cut in such a manner that, though still long, they did not impede the free movement of body and limbs. During this century and the beginning of that which followed, male and female garments are very much alike, and at first sight it is sometimes difficult to distinguish men from women,

especially as they wore their hair long and were generally clean shaven. The head-dresses of ladies remained comparatively simple, the usual covering being some variety of the *chaperon*, a low, cylindrical cap, beneath which a veil was often worn to fall upon the shoulders : one form of veil, the *barbette*, was bound round the head in such a way as to cover both chin and cheeks. For the dress of this period, see the rectangular enamelled casket in Pier-Case, Bay XIX, E, and the ivory caskets, mirror-cases, and writing-tablets in Table-Case, Bay XXI (figs. 32, 33).



FIG. 33.—Ivory mirror-case. French. Early fourteenth century.

About 1340 marked changes are apparent. Men adopted short tunics not reaching to the knees, with numerous buttons down the front, and long, tightly-fitting nether garments, either including the feet or stopping at the ankles : mantles were only worn on special occasions, a kind of pelisse being worn for ordinary use ; the toes of shoes became long and pointed. At the same time a tendency to décolletage is observable in female dress ; skirts had trains, and the hair was confined in nets or other coverings. Some of the later ivory mirror-cases and tablets illustrate the progress of these changes, which heralded the fantastic fashions of the fifteenth century. At that period costume perhaps reached a

higher pitch of exaggeration in form and colour than at any time in the world's history. Men now wore tight, parti-coloured breeches and shoes with even longer points than before, so long that sometimes they had to be actually tied to the leg to keep them from getting in the way. Their close jackets or pourpoints were short and tightly girded, their hair worn long and falling upon the shoulders. All kinds of cumbrous head-dresses were worn by both sexes, those of ladies reaching enormous proportions, some taking the form of large turbans, single or with two horns, and tall sugar-loaves, from which veils depended down the back. Some of these fashions may be seen on the painted front of an Italian *cassone* or marriage coffer of about 1450 on the west wall in the Franks Room.

The latter part of the century witnessed a reaction towards a more sensible style of dress, partly due to the influence of the more restrained fashions now prevailing in Italy, and in the following century began the changes from which modern costume has developed. By degrees, through such transitional forms as doublets and trunk hose, the coat, breeches, and stockings of later times came into being; while the bodice and skirt succeeded the earlier garments of the feminine wardrobe, and hats were generally worn.

The wearing of black garments in sign of mourning, though known to the Romans and apparently to the Spaniards in the twelfth century, does not seem to have been adopted in France and England until the fourteenth. In 1365 the English Court went into mourning for King John of France, and in the latter country royal mourning is recorded about fifty years earlier: in the fifteenth century mourning became more general.

Gloves were worn throughout the Middle Ages. Special thick gloves were worn in hawking; and in the Church the glove was the attribute of the bishop or mitred abbot. Mediaeval shoes are shown on the south pier adjoining the Franks Room (fig. 182).

COUNTERS.

The counters in the collection are chiefly playing-counters, not jetons or reckoning-counters. Jetons were used from the thirteenth to the seventeenth century in England for casting accounts and checking bills, generally on a surface marked in regular squares (whence the term *Exchequer*); they have generally a numismatic character, and examples are to be seen in the Department of Coins and Medals. But the two classes are really connected, since jetons, being very numerous and generally available, were often employed as counters for card games before special pieces were made for this purpose; even after that time old

families preserved as playing-counters jetons recording honours borne or high duties performed by members of the house.

The most interesting examples of playing-counters belong to the first half of the seventeenth century, though the production was continued into the century following. Sets of such counters, originally thirty-six in number, were made in the reign of Charles I; they bear portraits of sovereigns and their arms, either engraved, or struck in imitation of engraving. They are generally enclosed in cylindrical boxes, the tops embossed with the head of the

reigning sovereign, or with some other design. One example in the collection (fig. 34) is of gold, with allegorical figures and inscriptions, its costly character suggesting that it was made for a lady of high rank, perhaps a princess of the royal family.

Opinion has been divided whether the better counters, and certain larger contemporary medallions of silver with royal and other portraits, were really engraved or not. The more recent authorities incline to the view that they were, and that they cannot be the result of a mechanical process. Some of the fine examples are ascribed to the well-known Dutch engraver Simon van de Passe, who worked in England from about 1613 to 1622. According to Horace Walpole, he made counters with royal portraits at the instance of Nicholas Hilliard, to whom James I had originally given the commission.

FIG. 34.—Gold Counter-box, with cameo on lid. Seventeenth century.

The silver map illustrating Drake's voyage of circumnavigation, shown in the Table-Case, Bay XVI, is one of at least three examples engraved by Van de Passe in the same manner as the medallions and playing-counters.

CRAMP-RINGS. See p. 148.

CRESTS. See p. 18.

CROSS-BOWS. See p. 17.

CROZIERS (see also **TAU-CROSSES**).

The word *crocia* from which crozier is derived appeared in vulgar Latin in the eleventh century, the earlier words were



PLATE IV. CROZIER ATTRIBUTED TO FRÈRE HUGO, EARLY THIRTEENTH CENTURY.

baculus and *cambuta*. The pastoral staff seems to have been used by bishops as early as the fifth century; in the sixth and seventh centuries, there are various allusions to it in books and documents. The will of St. Remy (d. 532) alludes to a *cambuta* covered with silver with figured ornament. Isidore of Seville in 610 speaks of the giving of a pastoral staff to a bishop on his consecration; a canon of the Fourth Council of Toledo in 636 mentions the staff as part of episcopal insignia. The *baculus* of St. Columban is referred to in the Life of St. Gall. These early staves were crooked or curved at the top like walking-sticks, as which, indeed, some of the earliest may actually have served. The form is preserved in the decorative metal cases in which, in the eleventh and twelfth centuries, the Irish enclosed the original wooden staves of their early saints; within some of the cases remains of the old staves are still preserved.

The first authentic evidence as to form afforded by works of art is found in illuminated MSS. of the Carolingian period. There we see representations of bishops or abbots holding croziers, and in the Sacramentary of Drogo, Bishop of Metz (d. 855), the simple curve or crook already approximates to the volute, though the full volute was not universal until the thirteenth century.

The oldest surviving pastoral staves are the above-mentioned Irish wooden examples; that of the Abbot of Granfeil (d. 677), now at Délémont, which is of wood covered with repoussé plates of silver and gold, and another of similar construction in the church of Montreuil-sur-Mer; these have the simple crook. In the case of the eleventh-century wooden crozier of St. Ehrhard, Bishop of Regensburg, there is a plain volute ending in a dragon's head; in that of the painted ivory example in the British Museum, dating from the twelfth century, the volute has a similar ending, but contains a cockatrice within its curve. From the thirteenth century, crozier-heads were generally of heavy metal, bronze or silver, enriched with elaborate work; the stems were usually of wood, though sometimes covered in whole or part with metal. The enamelled crozier-heads of Limoges are illustrated by several specimens in the collection, while the beautiful example with applied foliage and niello attributed to Frère Hugo of Oignies, near Namur, calls for special notice (plate IV). Croziers buried with deceased bishops were commonly of wood; that of Bishop Lyndewode (d. 1446) in Pier-Case, Bay XVIII, is an example. The dragon's head, so frequently ending the volute in mediaeval croziers, is regarded as symbolical of the power of evil in defeat. The interior space is often filled by individual symbolic figures, such as the lamb, or by Scriptural subjects: Adam and Eve, the Virgin and Child, Annunciation, Coronation of the Virgin, Crucifixion, St. Michael and the dragon. The part about the socket, especially in the fourteenth century, often had a rich architectural decoration

of niches, canopies, and pinnacles, such as may be seen on the crozier of William of Wykeham, at New College, Oxford, a noble example, further enriched with plaques of translucent enamel.

The crozier forms no part of the papal insignia. The popes have carried instead the *ferula*, a shorter staff or rod, the idea associated with which is more that of sovereignty than correction; it represented rather the royal sceptre than the shepherd's crook.

CRUETS (*Amulae*).

In the Roman Church from very early times two small vessels resembling ewers have been used to contain respectively the wine and the water for the chalice. They are usually of silver, but were occasionally made of crystal or agate, especially in the eleventh and twelfth centuries: in the Middle Ages they were sometimes made of wood, especially box (Fr. *buis*), from which the French term *burette* is derived. Cruets commonly had engraved upon their tops the initials A and V for *Aqua* and *Vinum* respectively.

In the English Church after the Reformation cruets were superseded by *flagons*, the earliest examples dating from the time of Elizabeth; these also were commonly made in pairs. Down to about 1615 they still preserved some resemblance to cruets, and had high feet, narrow necks, and spherical bodies; from that time dates the introduction of tankard-flagons, of which the example in Pier-Case, Bay XVI, F, from Seaford, Sussex, dated 1642, is a good illustration. This, like many other early flagons, is of pewter, for the flagon was not so invariably made of precious metal as were the chalice and the paten.

CRYSTAL.

Rock crystal (a colourless hyaline quartz) was alone described as crystal till the sixteenth century, at which time the clear glass of Venice was also given this name. It was engraved in intaglio as a gem by Carolingian lapidaries (*see* p. 102), and in the twelfth and thirteenth centuries a number of small reliquaries, flasks, and pierced cylinders or spheres for ornamenting the staves of croziers or stems of vessels, were made. The more important of these are carved in relief with designs often of oriental character; the fashion of carving crystal received a new impulse from the Mohammedans, who were in the habit of making ewers and flasks of this stone. Crystal continued to be used for beads and other small objects down to the Renaissance, when quite large cups were frequently made of it (examples in the Waddesdon Bequest; and in the Sloane Collection, Franks Room, Case A). Intaglio designs were again cut on plaques of crystal: a set of such plaques by Valerio

Belli is in the Vatican, and the Victoria and Albert Museum possesses a cross and two candlesticks enriched with engraved crystal by the same artist. Such intaglios sometimes provided models for metal plaquettes. Crystal, like other stones, was considered to possess curative powers, and the crystal spheres worn by the Anglo-Saxons had an amuletic significance (Iron Age Gallery). Spheres of crystal



FIG. 35.—*Cuir bouilli* case for a book. Italian. Fifteenth century.

were used for what is known as crystal-gazing ; the example in Table-Case, Bay XVI, is said to have belonged to Dr. Dee.

CUIR BOUILLI.

‘Cuir boli’ is mentioned in manuscripts as early as the twelfth century ; but the surviving examples of finely incised, embossed and stamped leather chiefly date from the fourteenth to the sixteenth century. It was used to make sword- and knife-sheaths, shoes, bottles, caskets, boxes and cases of all kinds for books, ivories.

knives, and instruments, and was known, though inaccurately, as *cuir bouilli* (boiled leather), for though when boiled either in water alone or in oil or wax leather certainly becomes soft, it dries as hard as horn and as brittle as glass. On the other hand, immersion in oil or melted wax, while only moderately hot and well below boiling-point, is calculated to leave the leather supple, and, by drying gradually, to give the designs the requisite hardness and durability without brittleness. When, therefore, the early writers speak of boiling, they should be understood as meaning rather a steeping process. As a medium, the mediaeval craftsmen seem to have used melted wax dissolved in certain essences, rather than linseed oil as Viollet-le-Duc supposed. But modern imitations made by means of stamps are produced from leather which has undergone no such elaborate preliminary treatment.

The early writers on the industrial arts, Heraclius and Theophilus, are silent on the subject of *cuir bouilli*; and Étienne Boileau in his *Livre des Métiers* (about 1258) only says that the art was practised by the *gainiers*, or makers of sheaths and cases, under stringent regulations ensuring work of good quality. In 1560 the statutes of the *maîtres gainiers* of Paris ordain that all leather bottles must be of ox- or cow-hide; these seem to have always been the hides preferred, though the skins of the calf, horse, and ass were also employed.

The method of manufacture appears to have been to form the object in plain leather, and over this to apply a second leather covering, upon the surface of which the ornamentation was afterwards executed. The necessity for two thicknesses is particularly insisted upon in the *Livre des Métiers*, and they are found in all the good early examples.

The most important part of the decoration in the earlier work was incised and embossed by the free hand, but small stamps or punches were used for the grounds. Where the reliefs are in large masses or very high, they may sometimes have been roughly modelled upon the inner leather in some kind of filling glued to the surface. Over this the upper leather in a soft state would then be applied, and the grounds punched down: where the relief is low, no such filling would be necessary. Another method of accentuating relief was to insert a spatula and work the design up from beneath, though this involved making an incision along one side. This is a process which was in special favour with the Italian craftsmen of the fifteenth and sixteenth centuries, and sufficed for foliage or conventional designs. But for the human figure, which was reproduced with increasing frequency in the sixteenth century, repeated pressure must have been employed in order to secure precision of modelling; and this must have been applied from the back before the leather was finally fixed in place.

The tools used in making the incised designs were probably heated, as modern experiments have shown that when the metal is hot enough slightly to burn the edges of the cuts, the incised lines, when dry and hard, form a somewhat wider channel and

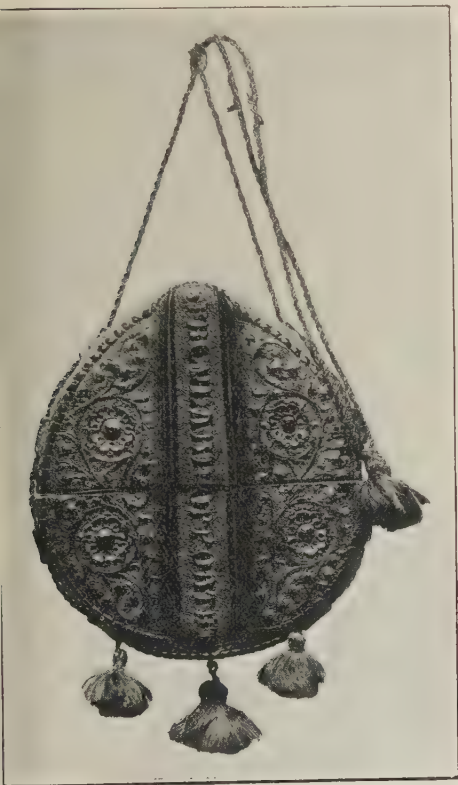


FIG. 36.—*Cuir bouilli* case, probably for an astrolabe. Italian. About 1520.



FIG. 37.—*Cuir bouilli* case with surgeon's instruments. Italian. Sixteenth century.

produce a bolder effect. The designs upon *cuir bouilli* were constantly coloured and gilded, gilding being specially applied to the grounds. In the sixteenth century, the *gainiers* began to use metal matrices in which the whole design was cut in intaglio; they now also began to follow the methods of the bookbinders, and by the seventeenth century working in *cuir bouilli* had ceased to be an independent art.

This kind of work was popular in all countries, especially in Italy and France, where very beautiful examples were produced, among the finest being the splendid sword-sheath made for Caesar Borgia in the Victoria and Albert Museum. Although the best work is found upon objects of use rather than upon articles of apparel, shoes were often decorated by this process. Examples of English shoes may be seen in the frame upon the wall of the south pier adjoining the Franks Room. *Cuir bouilli* was in extensive use in England in the Middle Ages: the case for sacramental plate from Little Welnetham Church, Suffolk (Pier-Case, Bay XVI, B, and fig. 172), is probably an example of English work, like the case of similar form of the fourteenth century in the church of St. Agnes at Cawston in Norfolk. The effigy of Henry VIII exposed to public view during his obsequies was of this material, and it will be remembered that Chaucer describes Sir Thopas as wearing jambeaux of 'coorbuly', for it was largely employed to strengthen armour in the time of transition between the periods of mail and plate. It was also used for crests and for the bardings of horses. In 1467, when Lord Scales and the Bastard of Burgundy fought at Smithfield, the fourth horse of the latter is described as 'coovird with bardes of courbuly'.

CUP DIALS. See p. 71.

CUPS, JUGS, &c.

Mediaeval and later plate is chiefly represented in the collection by drinking cups, the series brought together by Sir A. Wollaston Franks forming the most important part of the whole; plate, in the wider sense of the term, is best studied at the Victoria and Albert Museum.

Very few cups made of precious metal, or of other materials richly mounted in it, have come down to us from the earlier mediaeval centuries. The oldest example in the collection is the footless covered cup in the form of a deep bowl with vine-ornament in relief, which may be Carolingian work of the ninth century (Franks Room, Case C); but this, like the Halton bowl (*Guide to Anglo-Saxon Antiquities*, fig. 134), is a rare survivor, and the next centuries are not represented by many examples in any collection. Cups, like jewels, were easily convertible into money, and in ages without any developed system of credit were regarded as capital. They were pledged as security and melted down when money was urgently required; the well-to-do possessed relatively more silver than they do in modern times, not so much because they were naturally more luxurious, but because in plate they had a convenient and portable form of property. The number of precious vessels of gold and silver, often enriched with enamels, gems, and pearls, is

astounding to the modern reader, to whom it seems almost to verge upon the fabulous. The wars and disturbances of the Middle Ages destroyed the greater part of the vast wealth in such objects described in the mediaeval inventories, more especially in those of the fourteenth century. In accounting for the disappearance of almost all the rest, it has to be remembered that another cause has been at work ; the changes of fashion from the Renaissance onwards have constantly induced the owners of old plate to have it melted down and translated into the forms



FIG. 38.—Scandinavian drinking-horn. Fifteenth century. Franks Bequest.

preferred in their own day. Two very fine cups with royal associations have however been preserved. The silver 'Emperor's Cup' at Osnabrück, with the Virtues and Vices and other figures, and with enrichment of enamel, is of the thirteenth century, though the stem and the top of the cover are later additions. The second and more splendid example is to be seen in the collection ; this is the enamelled Royal Gold Cup described below. Other mediaeval cups in the collection, earlier than the fifteenth century, include the Flemish goblet of the early thirteenth century, with engraved crystal bowl and silver gilt stem and cover ; and a silver bowl on low foot with a monster engraved in the centre, also of the thirteenth century, and perhaps English. The oriental glass

cup in the Waddesdon Bequest (No. 53) has a silver foot and stem with crystal knop, apparently French work of the fourteenth century. Cups of this period have been saved through belonging to corporate bodies; thus in England the colleges at Oxford and Cambridge have preserved examples now of the greatest variety and interest, including the enamelled silver beaker at Trinity Hall, the Corpus (Cambridge) mazer and drinking-horn, and the Queen's (Oxford) drinking-horn.

Some forms of cups were adopted by silversmiths from types in wood, horn, or metal in regular domestic use; the beaker, the drinking-horn, and the mazer (p. 173) are examples. But the form of the chalice, a bowl resting on a straight stem with knop and expanding foot, and the more squat form of the ciborium, must long have influenced the development of secular cups; probably no small number of the earlier mediaeval standing examples, now lost, showed the relationship. The well-known enamelled silver gilt cup belonging to the Corporation of King's Lynn may perhaps be regarded as transitional between the chalice type and independent forms; both the Osnabrück cup and the Royal Gold Cup were originally of ciborium type.

The Royal Gold Cup (Central Case in the Franks Room) enamelled in *basse taille* with the legend of St. Agnes (plate I, and fig. 39) must be specially noticed in the present place. It has, unfortunately, suffered both by loss and by addition. The cover has been deprived of the fine finial enriched with gems and pearls once surmounting it, and of the delicate cresting of gold leaves and pearls once completing the lower edge and corresponding with that round the foot; the original proportions have been destroyed by the elongation of the stem. Two broad gold rings have been inserted, one above the other. The lower, with Tudor Roses in enamel, is perhaps an addition of the time of Henry VIII; the upper, with enamelled inscription, was inserted in the seventeenth century by the Spanish envoy to whom the cup was presented by James I. The original appearance of the cup is shown in fig. 39, but it was made to rest upon a separate stand of enamelled gold, mentioned in the early inventories, but lost at some undetermined period. Doubtless produced in Paris, it was presented by the Duc de Berry in 1391 to his nephew Charles VI, King of France. While John, Duke of Bedford, was Regent of France it became his property, and he left it to his nephew King Henry VI. It remained part of the English royal treasure until the reign of James I; but in 1604, on the occasion of the treaty of peace between Britain and Spain, that king presented it to the Constable of Castile, Juan de Velasco, who came to England as special envoy. By the Constable it was given, in the year 1610, to the Convent of Santa Clara at Medina de Pomar, near Burgos. There it remained until 1883,



FIG. 39.—The Royal Gold Cup in its original form.

when it was sent to Paris to be sold for the benefit of the convent, then urgently in need of money. It was bought by Baron Pichon, in whose collection it remained until 1891; it was then acquired by Mr. Charles Wertheimer of London, who ceded it to the Museum for the sum which he himself had paid, and subscribed towards its acquisition for the nation. There seems little doubt that the cup was originally made for secular use, though, while in Spain, it was specially consecrated, and devoted to religious purposes. It is described in the inventory of Charles VI as a *hanap*.

The closing years of the mediæval period are represented by a greater number of examples, some standing cups, some of beaker form, some mazers (p. 173) or mazer derivatives; these are mostly of Flemish, German, and English origin, the English group having associated with it examples of the Salt, which divided the more important guests from the less at table. The Franks Bequest contains two fine, covered beakers with Gothic crestings dating from the late fifteenth century. Both have figure-subjects derived from early German engravings, but one is silver gilt, the other has all its subjects in niello (plate XI). The same Bequest contains the Winchester mazer of 1490, a Flemish mazer with cover on an enamelled silver foot, made for Count Louis of Flanders, a silver gilt cup of mazer type upon a foot, but with stem and handle, and Scandinavian drinking-horn with silver mounts; while the Waddesdon Bequest has a chalcedony standing cup (No. 119) of the same period. Several colleges at Oxford and Cambridge have mazers, coco-nut cups, other standing cups, and covered beakers and salts of about this time. In England such mediæval types as the mazer persisted in the first half of the sixteenth century, and the mounts of coco-nut and other cups retain the Gothic crestings. The earliest example of an English standing cup bearing a hall-mark is of the year 1481, but the Foundress's Cup at Christ's College, Cambridge, is shown by the enamelled arms within it to date from about 1440. Venice in the late fifteenth and early sixteenth centuries produced glass cups some of which had forms of northern type based on metal originals, for instance No. 59 in the Waddesdon Bequest, which includes other Venetian cups of the period.

In England, as in Germany, the middle and later part of the sixteenth century was the great period for standing cups, not only of metal, but of various material, such as nautilus shell, or the shells of ostrich eggs and coco-nuts. It was not until an advanced period in the century that the grotesques, arabesques, and other universally current designs of the Renaissance came into general use, and were employed by our silversmiths. In all countries the forms of cups now became taller, the stems more slender, mythological or other figures were sometimes introduced to support the bowl. Examples are exhibited of most of these types. Cups with historical associations are that of Lord Burghley in the Franks Bequest, the body



PLATE V. THE BACON CUP.

formed of a slender glass cylinder, the lid bearing his arms in enamel (*c.* 1570), and one of three made in 1574 for Sir Nicholas Bacon, Lord Keeper, from the silver of the great seal of Mary and Philip II which weighed about 120 oz; this cup, made for the Lord Keeper's house of Redgrave was long in the Wodehouse

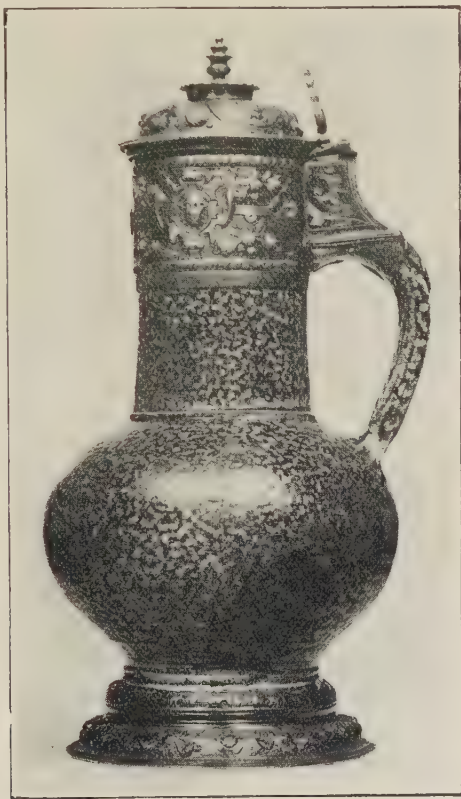


FIG. 40.—German stoneware jug with English silver mounts. Sixteenth century.

family, which traced its descent from him, and was presented by Mrs. Edmond Wodehouse in 1915 (plate V). The Goodricke Cup in the Franks Bequest, made in London in 1563, had originally a bowl of ostrich egg-shell, but this was replaced in the reign of James I by the present silver bowl with engraved subjects. The remarkable cup in the form of a terrestrial globe supported by Atlas was made by

a French silversmith, Oronce Finé, in 1569; Case D contains a silver gilt table-ornament in the form of a ship, made in imitation of the mediaeval *nef* in which the lord's knife, spoon, and napkin were placed. The south of Germany was distinguished for the manufacture of elaborate cups during the period in question, Augsburg and Nuremberg being the chief centres of production. The forms taken by these late cups are well illustrated in the Waddesdon Bequest, which is rich in examples from these cities. Attention may be drawn to the lobed and gadrooned forms which began in the fifteenth century, but continued into the seventeenth. The Waddesdon Bequest also includes fine examples of ostrich-egg cups (Nos. 111-113), nautilus cups (Nos. 114-116), and rock-crystal cups (e. g. No. 77), all of the later sixteenth century. Of this date and rather later are the cups in the same Bequest made in the form of animals and monsters, often no doubt in allusion to the crests of the owners; these cups are of South German origin. A German cup in the Franks Bequest has, when inverted, the form of a standing female figure holding a small revolving hemispherical cup above her head. At wedding feasts both are said to have been filled. The bridegroom had first to drink the contents of the larger cup, then turn it head upwards without spilling any of the wine in the smaller, which he then offered to the bride.

In the South German cities marks were first used under the direction of a Committee of Masters; afterwards came the stamping with the city mark. The most famous city marks were the pine-cone of Augsburg and the capital N of Nuremberg, but as silver-work was produced in all the important towns the number of marks is very considerable. At the same time the master who made the piece impressed his private mark, usually consisting of his initials. It was the rule at Nuremberg that every apprentice should make three master-pieces upon his admission as a master, and of these the most important was a lobed cup suggesting the columbine in form and known as an *Ackleibecher*: the cup in the Franks Room (Case D, and fig. 41), often wrongly described as the Cellini cup, is such a Nuremberg master-piece; the custom continued down to the eighteenth century, and a number of such cups are in existence. Though the productions of certain cities can be identified by certain peculiarities of style there is a general resemblance among them all, partly due to the custom which prevailed among young silversmiths of spending some time at the great centres of Augsburg and Nuremberg, partly to the similarity among the engraved designs from which all masters worked.

Characteristic forms of the seventeenth century were steeple-cups, tankards, tazza-shaped cups like large champagne glasses, tasters, and caudle-cups. The steeple-cup, retaining a stem of late sixteenth-century style, has an elongated bowl with a lid surmounted by a kind of steeple. The type belongs to the period

of James I, and is represented in the exhibition by an example deposited by the Rector and Churchwardens of Monken Hadley, Herts. (Case C). The tankard, with its cylindrical body and handle on one side, was already used in the sixteenth century ; the Burghley cup is of this form. In the first half of the seventeenth century tankards are tall ; in the second half they are short and broad ;



FIG. 41.—German standing cup. Nuremberg.
Sixteenth century.

the type with curved sides was introduced in the first half of the eighteenth century. Tasters, sometimes called bleeding-cups, are small, shallow bowls with a flat handle projecting from each end ; they were used in the sixteenth century, but most of those now in existence date from the middle of the seventeenth to the beginning of the eighteenth century ; a fine Swiss example is in the Franks Bequest (Case B). The tazza-shaped wine-cups belong to the

later sixteenth and to the first half of the following century ; the examples in Case D are of the latter period. Caudle-cups and porringers were much used in the later seventeenth century and the early part of the century following. Both are two-handled vessels with covers and without feet, but the caudle-cup, used for drinking posset, is smaller at the mouth than the porringer. Cups of the eighteenth century are hardly represented in the collection. Those of the latter part of the century were influenced by the revival of classical forms (p. 195).

Jugs of stoneware and porcelain were mounted with silver. The jugs of mottled stoneware made at Cologne, sometimes called tiger-ware jugs, frequently received silver mounts and covers (examples with English mounts of the late sixteenth century in Case B ; see fig. 40). Jugs of tin-glazed ware and Delft were also mounted in silver. A small jug of Venetian lace-glass with English mounts of 1548 is in the same case, which also contains a fine Rhodian ewer in rich colours with English mounts of 1597-8.

The Waddesdon Bequest includes a large rock-crystal ewer mounted in enamelled gold and set with jewels—German work of the sixteenth century (No. 75)—and a small bloodstone ewer with mounts of even greater richness, made in Italy or France in the same period (No. 69) ; these belong to the class of sumptuous objects made for display on the tables of princes and persons of great wealth.

DATES.

When dates are expressed in Arabic numerals their interpretation is simple, the only difficulty being the unfamiliar forms of certain numbers (see fig. 132). Dates in Roman letters sometimes appear more complicated. The value of Roman letters are as follows :

I = 1, X = 10, C = 100, M or CIO = 1000,

V = 5, L = 50, D or IO = 500.

Formerly multiples were indicated by simply repeating the figure ; but when repetition would require four figures modern usage replaces IIII by IV (except on dials of clocks and watches), VIIII by IX, XXXX by XL, and LXXXX by XC. The small 'o' placed over Roman numerals signifies that the number is to be read as a numeral adjective in the ablative case, agreeing with 'anno' ('in the year') understood. Thus $\overset{\circ}{M} \overset{\circ}{CCC} \overset{\circ}{L} \overset{\circ}{V}$ = (*anno Domini*) *Millesimo trecentesimo quinquagesimo quinto* = A. D. 1355. For the first seven centuries of our era, dates were reckoned by the tenure of office of consuls, by indictions (periods of fifteen

years), or by the years of the kings' reigns. Dating by the year of Our Lord came into general use through its adoption by Bede in the eighth century. The custom was carried to the Continent by Boniface, and accepted by the Frankish Kings, the Emperors, and the Popes; the latter, however, did not use it permanently until 1048.

Down to at least the eleventh century, the Christian year began on the 25th of December. The Popes kept this date until the close of that century, the Emperors until the second quarter of the thirteenth; in England it lasted until the time of the Plantagenets. The new year then began on Lady Day (25th March), and this continued the general rule until the latter part of the sixteenth century. In 1582 Gregory XIII, reforming the calendar, ordered the year henceforward to be reckoned from the 1st of January. In doing this he fixed a day which had been used by the Romans of the imperial age and re-adopted in various countries not long before his own reform. The acceptance of the 1st January was even now not universal; our own country was among the last to admit the change, the reform not being made in England before the reign of George II (1752). In written documents, days of the month were reckoned after the Roman fashion by Kalends, Ides, and Nones down to about the ninth century, though Gregory the Great (d. 604) had temporarily introduced in his chancery our present way of counting straight on from the first day of the month to the last, which seems to have originated in the East.

DIALS.

Dials are instruments for telling the hours by means of a shadow cast by the sun: they have been known for considerably more than two thousand years (cf. Isaiah xxxviii, 8, probably about 700 B. C.), but were finally superseded in the eighteenth century by clocks and watches, and are now manufactured only as ornaments for gardens and buildings.

A dial is made by fixing to a flat surface a rod (style or gnomon), forming with the horizon an angle equal to the latitude of the place for which it is to be used, and then drawing a line upon the surface behind it in such a way that the shadow of the style falls upon it at noon, which means that the plane through the style and the sun coincide with the meridian. After this, other lines are traced at the intervals where the shadow would fall at each succeeding hour. Fixed dials are inaccurate if used at any other latitude than that for which they are constructed.

The dials in the Museum collection are of the portable kind, which was of much later invention than fixed dials, though examples from the period of the early Roman Empire show that both the type which could only be used in one latitude, and the

more advanced variety which could be used anywhere, were known to the Romans. The first type is represented by a bronze ham-shaped dial in the Naples Museum, found at Herculaneum in 1754, with hour-lines engraved on a flat surface; the second, by a circular bronze dial in the Lewis Evans Collection at Oxford. All the various forms of portable dials are really descended from these earlier types, but the variations are so numerous that only a few can be mentioned below. The gnomons also take many shapes, being often formed by strings, which are taut only when the instrument is open; such are those of the flat ivory dials of

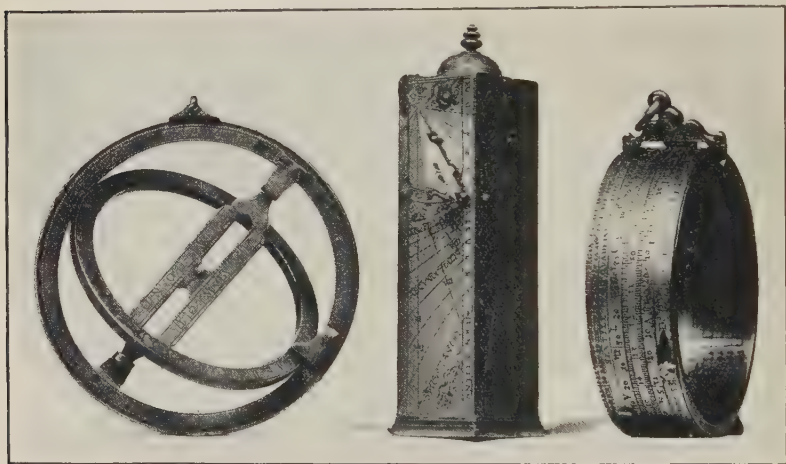


FIG. 42.—Dials of the sixteenth and seventeenth centuries. On the left, armillary dial by E. Culpeper of London, late seventeenth century; in the middle, pillar dial, Munich, 1567; on the right, ring dial by Humfrey Cole, 1575.

the seventeenth century which close like tablets or books. The earlier portable dials relied for the determination of time solely upon the sun's altitude above the horizon; they thus had this great defect, that when they were used about midday it was first necessary to determine whether noon was already past or not. To obviate this difficulty, after the thirteenth century a compass was set in the face of the dial, and instruments of this kind, in brass boxes with folding gnomons, were commonly made in England down to the eighteenth century: some were so small as to be mounted in finger-rings. It may be remarked that dials are frequently decorated with figure-subjects, religious or secular, and with conventional ornament, while inscriptions are also found:

a fine folding dial made at Rome in 1593 shows engraved diagrams and figures based upon the *Ars Sciendi* of Raymond Lull. The following are interesting forms of dials represented in the collection.

The *chalice*-, *goblet*-, or *cup-dial* (*horologium in cratere*) is in the form of a cup, the hour-lines being engraved on the interior. The fine example in the Pier-Case, Bay XIV, F, was made in Bavaria in 1550.

The *pillar dial*, or *chilindre*, in its commoner form was a cylinder with a movable gnomon at the top. This is set at the right position for the day of the month as shown in a scale round the base. The dial is then suspended vertically with the pointer towards the sun; the shadow then falls upon the curved hour-lines engraved round the cylinder. These dials, sometimes called shepherds' dials, were in common use from the thirteenth to the seventeenth centuries, and the type is still found in the Pyrenees.

The *quadrant* (p. 222) was commonly used as a dial. The altitude of the sun was taken through the pierced sights, and the time shown on the curved hour-lines by means of a plumb-line hanging from the angle.

The *ring-dial* (fig. 42), apparently first described in a treatise written at Paris in 1507, though probably known earlier, is in its most ordinary form a flat ring of brass, on the inner side of which are engraved the hours of the day, while on the outer side are the names of the months. Round the middle of the outer side runs a narrow, sliding ring covering a slit, and in this ring is a small hole. When the dial is used, the sliding ring is pushed round until the hole is opposite the day of the month; the instrument is then held by its suspension-ring and turned to the sun, so that the rays of light passing through the hole form a bright spot which indicates the time. It is probable that in the familiar line from *As You Like It* (Act II, Sc. vii)

And then he drew a dial from his poke.

a dial of this type is intended. Ring-dials were very popular in England and were made at Sheffield down to about the year 1800.

The *armillary dial*, or universal ring-dial (fig. 42), consists of two flat rings, the inner of which is turned at right angles to the outer when the instrument is in use: a bridge with a cursor forms a diameter of the larger ring, and in the middle of this there is a small hole. The outer ring, which represents the meridian of the place where the user of the instrument is, has engraved upon it, on diametrically opposite sides, two divisions of ninety degrees, one serving from the North Pole to the Equator, the other from the Equator to the South Pole. The inner ring, which represents the Equator, has the hours engraved upon it. On the bridge, which represents the polar axis, are engraved on one side the

signs of the Zodiac, on the other the names of the months. When the dial is used, the cursor is set to the day, and the suspension-slide, by which the instrument is carried, is moved to the required degree of latitude. The dial is then held with the flat side of the bridge towards the sun, so that rays of light pass through the hole in the cursor: the luminous spot falling upon the inner ring, will mark the hour of day.

The *nocturnal* (fig. 43) is an instrument for finding the time at

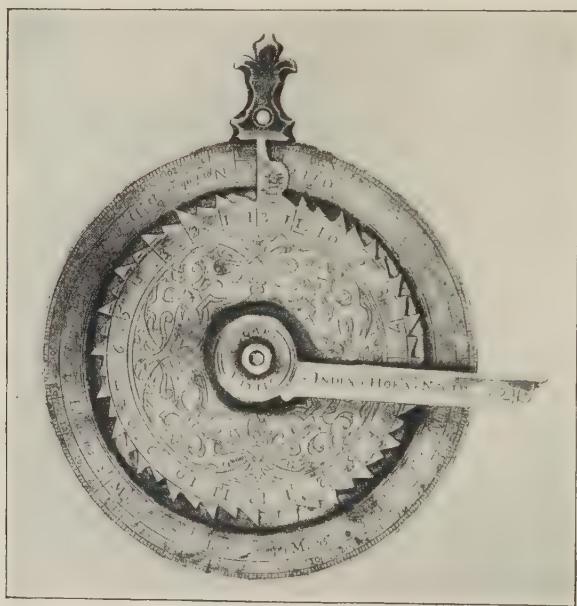


FIG. 43.—Nocturnal, by Humfrey Cole. About 1590.

night by means of the relative positions of the Polar Star and some other star or stars, usually the pointers of the Great Bear or two stars of the Little Bear. In the simpler form it consists of two disks placed one upon the other, the larger having a short handle projecting from its circumference, the smaller turning upon a central axis pierced with a hole. On the small axis turns independently a rule which projects beyond the circumference of the larger disk. On the border of the larger disk are engraved the days of the year, the day on which the sun and the star to be observed have the same right ascension being placed opposite the middle of the handle. The smaller disk has the hours, and is

also divided into $29\frac{1}{2}$ parts for the days of the lunar month. It has a long projection, commonly with an engraving of the sun at the end, to indicate 12 o'clock, and usually a sequence of teeth or small projections round the edge: those projections enable the observer to tell the hour by touch when it is dark. On any night when it was desired to find the hour, the pointer or index on the smaller disk was set opposite to the right day of the month in the calendar engraved round the larger disk. The instrument was then held with its handle pointing vertically downwards, and the Pole Star was viewed through the hole in the central axis: finally the rule was set at the point where its edge was in line with the star under observation (e.g. the two stars of the Little Bear). The position of the rule upon the smaller or hour-disk then marked the time. A fine example, made by Humfrey Cole about 1580, is exhibited in the Table-Case, Bay XIV (fig. 43).

DICE. *See* p. 100.

DINANDERIE. *See* p. 244.

DIPTYCHS. *See* p. 117.

DRAUGHTS. *See* p. 100.

DRINKING-HORNS. *See* p. 64.

ENAMEL.

Enamel (derived, with the French *esmail*, *émail*, from the old Teutonic *smaltjan*, to melt) is glass powdered and fused to the surface of the object which it is desired to ornament: it is in fact a layer of melted glass, and may be applied to any substance which can bear a red heat. Thus the glaze applied to pottery and porcelain, and the over-glaze colours of the latter, are essentially enamel, but the word is generally understood to mean glass fused upon the surface of a *metal* object in such a way as to form an ornament or design and, by implication, the object itself. The plain, uncoloured glass, which should contain oxide of lead to make it easily fusible, and should always be of uniform quality, readily combines with metallic oxides, which impart to it a variety of tints. If oxide of tin is added to glass coloured with any of these, the colour, which without it is translucent, becomes opaque; if oxide of tin is added alone to the plain glass, an opaque white is produced. The coloured glass produced by the agency of these oxides having been ground to powder in a mortar containing water, is placed in position while still damp, and fixed by firing

in a furnace, several firings being always required. The surface of most enamels other than those described as painted (*see* below, pp. 76, 88) is finally ground and polished. In the following paragraphs a few technical points must necessarily be mentioned in describing different kinds of enamel, but to deal with the

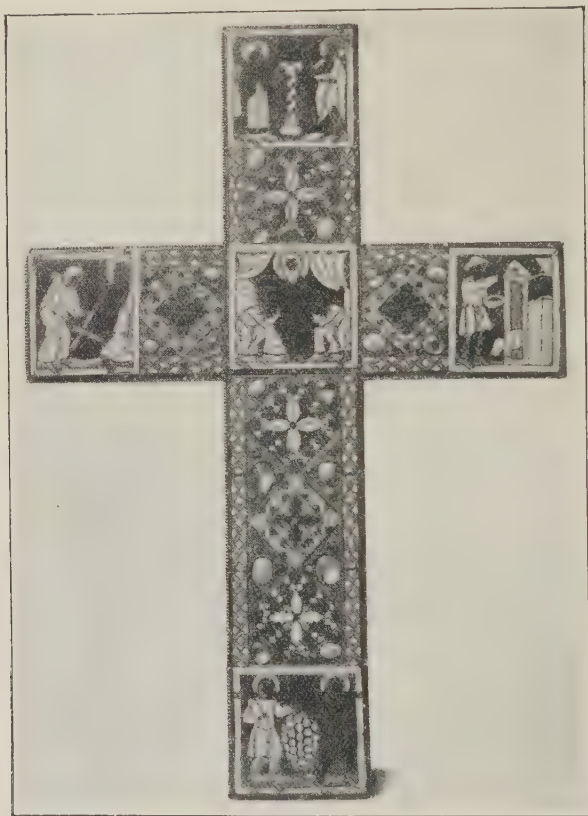


FIG. 44.—Enamelled cross, attributed to Godefroid de Clare of Huy. Late twelfth century.

technical processes as a whole would be impossible in a general guide like the present.

Enamelling, like the greater vitreous art of mosaic, has the advantage of durability, and, like mosaic, fulfils its proper destiny, not by close imitation of natural forms, but by obeying the conventions imposed upon it by the nature of its materials. Working

with flat colours placed directly side by side and framed in precious or gilded metal, the enameller can produce formal designs admirable in their harmony and splendour.

The principal kinds of enamels are known by the following names :

Champlevé, or *en taille d'épargne*, in which the ground or base is excavated to receive the vitreous powder, which is thus embedded in it before being fired. This was the process employed by the Celts and Romans, and was the chief method employed by mediaeval enamellers from the close of the eleventh to the fourteenth century. The favourite metals in all these cases were bronze and copper, the former finding favour with the earlier craftsmen, the latter with those of the Middle Ages.

Cloisonné, or *cell-enamel*, in which the powder is contained within applied cells formed of thin strips of metal bent to any outline required by the design, and soldered edgeways to the base, which, like the strips, was generally of gold, though sometimes of silver or copper.

Translucent enamels on sunk relief, or *émaux de basse-taille*, usually for the sake of brevity called *translucent enamels*. In these the design is cut in relief in the metal, but below the surface so that even the highest parts which are to receive enamel do not quite reach the level of the surrounding metal. When the cavity has been filled with translucent enamel, the colour, which over the highest parts of the relief is pale, is darker over the lower parts, and finely graduated effects of light and shadow are thus produced. The metals used for the base are either silver or gold, as these give an added brilliancy to the colour laid upon them. This method was introduced at the close of the thirteenth century, and in the two following centuries was extensively practised (p. 86).

Enamels on high relief, or *on the round*. This process was employed by the Greeks for jewellery, and was revived in Europe in the second half of the fourteenth century, but was especially popular with the goldsmiths of the Renaissance (p. 88).

Enamel in openwork (*émaillerie à jour*) may be roughly described as cell-enamel without any base, the partitions forming a kind of grating. It only became popular in the fourteenth century, but was practised considerably later, as Benvenuto Cellini describes the method of its production in his treatise on the goldsmith's art. A small iron caisson of the required shape was first made and the interior entirely covered with a fine coating of clay. The design was then set out upon the surface of the clay in fine strips of gold, as in cell-work, but the strips were not in any way fixed to the foundation. When the firing was completed, the enamel could be removed from the caisson, the clay coating preventing its adherence, and the artist had at his disposal a small panel or medallion somewhat resembling a miniature stained-glass window.

Medallions of enamel in openwork were sewn upon garments of the time of Charles VI of France, but their full effect could only be obtained when they were placed in such a position as to



FIG. 45.—Enamelled plaques with figure of Henry of Blois, Bishop of Winchester and brother of King Stephen. Twelfth century (p. 82).

transmit the light. A fine example of this work is a beaker of the late fourteenth or early fifteenth century in the Victoria and Albert Museum, decorated with a band of enamel *à jour*. This kind of enamel has been revived in modern times.

Painted enamels. In these the enamel is thinly spread over the

surface of the metal, chiefly by means of spatulas and points, though brushes are also used. The process allows the artist to copy elaborate pictorial compositions, usually woodcuts and engravings. The metal base is copper, and the objects decorated are flat or slightly convex plaques, ewers, tazzas, dishes, plate, salt-cellars, and other domestic utensils. Both sides of thin plaques have to be covered with enamel, which must be of equal quality. This is done because the metal expands and contracts more rapidly than the enamel, and its contraction on cooling would cause the enamel to peel and crack, unless the plate were held between two layers of glass. All enamelled plaques executed after the second half of the fifteenth century have a layer of translucent counter-enamel (*contre-émail*) on the back. Painted enamels began at this period, and reached their perfection at Limoges within fifty years; but the art continued in various centres down to our own times, when it has been revived with great success.

Of the problems connected with the origin of enamelling and its early distribution in Europe, something has been said in the *Guide to the Antiquities of the Early Iron Age* (Index s. v. Enamel); nor are we here directly concerned with the art as familiar to the Celts, Greeks, and Romans, or as possibly known at an earlier date to the peoples of the Aegean. Though it is now believed by good authorities that there was no absolute break in the practice of the enameller's art after the fall of the Roman Empire in the West, mediaeval enamelling really began with the spread of the cloisonné process from the East Mediterranean. The method may have been suggested by the well-known gold jewellery of oriental origin (*orfèvrerie cloisonnée*) carried from the south of Russia by the Goths and Sarmatians, and transmitted to all the other barbaric tribes which succeeded to the inheritance of the Roman Empire in Europe; in this jewellery (examples in the Iron Age Gallery), gold cells applied in the same way as in cloisonné enamel enclose flat pieces of garnet or coloured glass paste, fixed in their places without the aid of fire. There may also have been some influence from Greek enamelled jewellery, where twisted gold wire serves to contain the enamel. But from whatever source derived, the cloisonné process on gold generally superseded the champlevé on bronze produced in Roman imperial times, and became the predominant method of enamelling down to the eleventh century. There seems reason to believe that upon the Rhine and Meuse the substitution may have been gradual, the two methods being sometimes used together on the same object, as in the case of certain transitional bronze brooches in German and French Museums. But there is little doubt that cloisonné enamelling, always the characteristic method of Byzantine goldsmiths (cf. *Guide to the Early Christian and Byzantine Antiquities*, 2nd ed., p. 144), first came from the Byzantine Empire to Italy, towards A. D. 600, and

developed in the North Italian plain under the Lombards, thence spreading into the Alemannic region about Lake Constance, into Carolingian France, and into England, where the Alfred Jewel in the Ashmolean Museum, and perhaps the Dowgate Hill brooch, belong to the same tradition (*Guide to Anglo-Saxon and Foreign Teutonic Antiquities*, pl. X). Cloisonné enamelling had appeared in the East Mediterranean in the Early Christian centuries, and

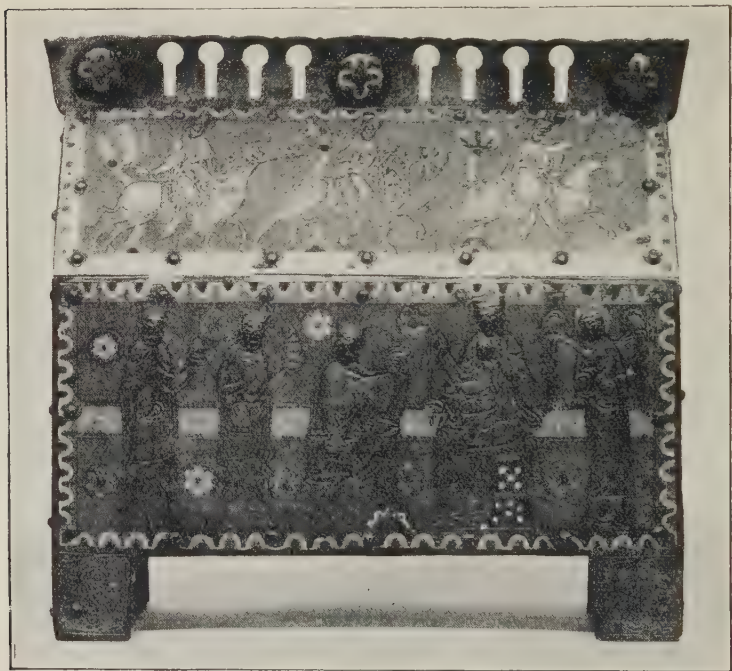


FIG. 46.—Enamelled reliquary with the Magi. Limoges. Thirteenth century.

Byzantine examples must have been continuous with these ; it was at any rate well established in the sixth century. But the great period of Byzantine enamel, as represented by surviving examples, begins with the tenth century, and the finest work was done before the middle of the eleventh ; though there are numerous examples ascribed to the twelfth century, or even to the early part of the thirteenth, it is held that the decay of the Empire subsequent to the sack of Constantinople in 1204 probably dealt a serious blow to the art. The influence of the great Byzantine period was directly felt in Western Europe, especially upon the

Rhine, in the reign of Otto II; it thus reinforced the older influence exerted through Lombard Italy. Many enamelled objects which have come down to us were till recently preserved in churches and monasteries in the Russian Empire, especially in Mingrelia; but Western Europe is fortunately also rich in fine specimens. Venice not only possesses the *pala d'oro* of St. Mark's, but a series of enamelled chalices, patens, and book-covers in the treasury of the same cathedral and in the Library of St. Mark. Among other notable Byzantine enamels in Europe are the sixth-century reliquary for wood of the True Cross at Poitiers; the later examples in the Cathedral of Limburg on the Lahn, and at Gran in Hungary; the gospel-covers at Munich (Reiche Capelle and Royal Library), Siena, and Milan; the crowns of St. Stephen and Constantine Monomach at Buda-Pesth; and the imperial regalia and vestments at Vienna. The museums of our own country have in comparison but little to show. The Victoria and Albert Museum, in addition to the Beresford-Hope Cross, has a plaque from one of the Hungarian crowns, and a small plaque with a bust of an apostle; the British Museum has medallions with busts of saints, and a small medallion with cruciform ornament in an eleventh-century Western setting (*Guide to Anglo-Saxon and Foreign Teutonic Antiquities*, plate X). The gold medallion with figure of Our Lord in the Franks Room is Italian work in the Byzantine style.

A derivative variety of cell-enamelling was practised in France in the sixteenth century, small plaques and medallions of glass being enamelled with ornament in the style of the well-known designer Étienne de Laulne. The design was cut in a piece of glass, the channels or cavities all expanding from the top to the bottom. Into these a lining of gold-foil was pressed, the edges showing at the top, and forming outlines to the enamel with which the cavities themselves were filled. The Museum has several examples of this work (cf. fig. 97), one forming the back of a watch-case. A process somewhat similar to this had been employed at Alexandria in Roman imperial times, and later in Ireland. On the well-known Ardagh chalice, some designs are cut in button-like disks of enamel, and the cavities thus made are filled with enamel of another colour, though without the interposition of gold foil. In the fifteenth and sixteenth centuries a process resembling cloisonné enamelling was popular in Hungary, designs filled with enamel being outlined in silver wire. Some Hungarian archaeologists compare this style of work with painted rather than with cloisonné enamels, regarding the silver wire as a simple element of decoration, like the gold threads in embroidery, and not as a support containing the enamel. Work of a similar kind was also made in Friuli, and in Spain, where paxes of the late fifteenth or early sixteenth

century have enamels in which the colours are separated by filigree. There is a certain analogy between this work and the delicate enamelled flowers outlined in wire made by the Greek jewellers before the beginning of our era: it has even been suggested that the reappearance of the kindred process in Central Europe may have been due to the survival of ancient traditions in the Balkan Peninsula.



FIG. 47.—Enamelled ciborium in the style of G. Alpais. Limoges. Thirteenth century.

At the close of this summary account of enamelling in the early mediaeval centuries a few words must be said as to Irish enamels, which stand in a class by themselves. The earliest known work is in *champlevé*, decorating penannular bronze brooches, the type of which was introduced from Wales in the fifth century. But Ireland does not seem to have adopted *cloisonné* in the proper sense of the word at the time when it first spread through the West. She retained instead an early Celtic method bearing a superficial resemblance to that process,

but apparently distinct. The division between the enamel was effected, not by separate strips of metal soldered independently to a base, but by a pierced disk or other form cut from a single piece; this held the enamel like a frame, and did not require any base other than the clay into which it was pressed and upon which the vitreous powder was placed before being fused. (Cf. the medallions on the shield found in the Thames at Battersea, *Guide to the Antiquities of the Early Iron Age*, pl. I.)

The expensive cloisonné process in gold was superseded in the Romanesque period, when there was a general return to *champlevé* in a less costly metal. Craftsmen now aspired to create objects of monumental quality; the art moved away from jewellery to ally itself with ecclesiastical metal-work; the surfaces to be covered were larger, the colour was applied in bolder masses. The change had been foreshadowed here and there in Carolingian times (earlier cover of the Lindau Gospels, now in the Pierpont Morgan Library at New York; reliquary of Pepin at Conques), though in the best-known instances gold was retained as the base. But the needs of Romanesque art could only be met by the use of copper,¹ in which shrines, portable altars, and other objects of large size were now executed. Cloisonné was not wholly abandoned. It coexisted with *champlevé*, employed chiefly in a subordinate capacity for details and decorative designs, especially on the Rhine and Meuse, the cells being made of copper, like the base. For small enamelled ornaments it continued to be made in gold down to the Renaissance, and remained popular with the Moors of Spain. The Arabs had inherited the style from Byzantine Sicily, and adhered to it until their overthrow. The re-establishment of *champlevé* as the predominant method in Europe may well have been furthered by a survival of the ancient *champlevé* tradition. If such a survival is admitted, the old disputes as to priority between the different centres of enamelling in the twelfth century lose their importance; it would be natural to suppose that a general demand for enamel decoration on larger and more massive objects led to the independent revival of the suitable method in more than one place where the tradition persisted.

The great centres of mediaeval enamelling were in the valleys of the Rhine and Meuse, and at Limoges in Central France, the artists of the Meuse, or of Lorraine, rising first to pre-eminence. In the twelfth century most enamelling was done for the great monasteries, though not always by monks. The house most noted for this work was the Monastery of St. Pantaleon at Cologne. Here after the time of Eilbert, the first enameller known to us by name, the influence of artists from the Meuse

¹ As noted above (p. 75) the Middle Ages substituted copper for the bronze used by the Celts and Romans.

was strongly felt. The work of Frederic, successor of Eilbert, shows the effect of this influence exerted through Godefroid de Claire of Huy. After Frederic's time, Nicholas of Verdun was placed in actual control of the workshops of St. Pantaleon. He, like Godefroid, was remarkable as a sculptor no less than as an enameller, but rose to a higher level of achievement. The learned character of the subjects represented by these masters is explained by their monastic relations, though the inspiration of their favourite typological scenes prefiguring the Passion need not have originated in their own districts. Lorraine enamellers worked for Suger, Abbot of St. Denis, who is known to have elaborated a series of such Old Testament types about 1140; they may have brought back the system of symbolic parallelism from this source. The enamellers, whose furnaces were easily set up, often travelled far afield. Godefroid de Claire may even have visited England; and it has been suggested by Mr. Mitchell that the two inscribed, semicircular plaques in the collection, with a representation of Bishop Henry of Blois, brother of King Stephen (fig. 45), may have been made by him as part of the decoration for the shrine of St. Swithin in Winchester Cathedral. Nicholas of Verdun, the greatest of the Lorraine artists, went to Vienna and executed the enamels of the altar at Klosterneuburg at the beginning of the thirteenth century.

The work of the Lorraine craftsmen represents the highest achievement of the twelfth century. The figures, often finely conceived, are generally enamelled in shaded blues, greens, and yellows, with the addition of red on an unenamelled gilt ground on which enamelled inscriptions are set out; the prevalent style is well illustrated by examples in the collection, where the work of Godefroid de Claire is well represented (Pier-Case D, and Table-Case, Bay XIX). At Klosterneuburg, Nicholas of Verdun reserved his figures, only enamelling the lines of draperies, features, hair, and other details, thus diverging from the usual practice. There are in existence a few enamels showing a certain affinity to those of the Meuse, yet differing sufficiently to suggest another origin. A crozier, now in the Museo Nazionale (Bargello) at Florence, signed by Frater Willelmus, has scenes from the story of David, and combats of Virtues and Vices accompanied by inscriptions; it has been conjecturally ascribed to the north (or east) of France. Three ciboria in Great Britain, one formerly at Warwick Castle, now at South Kensington, have suggested the possibility of a similar, or even of an English origin.

Enamels produced in lower Saxony in the twelfth century show the influence of the Monastery of St. Pantaleon at Cologne; the most important local centre appears to have been the Abbey of Hildesheim, from which a secondary influence may have extended to Westphalia. Lüneberg was perhaps another place of manu-



FIG. 48.—Enamelled panel with St. John the Evangelist.
Limoges. Thirteenth century.

facture. South Germany was backward in comparison with the north, producing little enamel and that of no great quality.

In France, the great home of *champlevé* enamel was at Limoges, where work of this kind was produced before 1150. It is not known with certainty why this city devoted itself to this form of art, nor is it even known where the necessary copper was procured, though the connexion of Limoges with Spain, through the pilgrimages to Roncevaux and Compostella, suggests that the southern peninsula was the source. This probable dependency has suggested to some inquirers that not only the material, but the art by which it was decorated, may have come to Limoges from Spain; but evidence as yet collected hardly suffices to establish the fact. As already stated, the Mohammedans in Spain chiefly used the *cloisonné* method; but there are examples of *champlevé* dating from the middle of the eleventh century, for example, on the Moorish ivory casket in the Cathedral of Palencia, while at Toulouse there are enamels differing in style from those made at Limoges. The relation between the vitreous art of France and Spain in the eleventh and twelfth centuries in any case affords an interesting field of research.

The majority of the *champlevé* enamels produced at Limoges belong to the latter part of the twelfth century and the first half of the thirteenth, though the industry continued into the following century. The word industry may not unfairly be used, since the enameller's craft at Limoges, at any rate after 1150, was carried on in lay workshops unrelated to monasteries, and executing orders on a commercial scale for widely distributed markets. The work produced was very largely for church use; but secular objects were numerous. On objects of the former class the symbolism with its explanatory inscriptions, prevalent on the Meuse and Rhine, is not found; the artists contented themselves with the more obvious forms of sacred persons and subjects, and the figures or legends of popular saints. Though inscriptions occur, they are rare, the most conspicuous examples being found on the plaques made for tombs, such as that of Geoffrey Plantagenet (d. 1151) in the Museum of Le Mans, and that of Guy de Meyjos in the Louvre, dated 1307, where the inscription fills several lines.

Limoges enamels have been divided into three successive classes: (i) those in which the figures are enamelled while the ground is gilded and ornamented with continuous scrolls or with a number of stars (late twelfth century to about 1230); (ii) those in which the figures are reserved in the metal, or applied to it, while the ground is enamelled (about 1230 to about 1250); (iii) those in which the figures are reserved, as before, on a ground of enamel, but have the interior lines (features, folds of draperies, &c.) deeply cut and filled with enamel after the style of niello, whence the name *émaux de niellure* (about 1250 to first half of

the fourteenth century). There are naturally subdivisions of these classes into which it is impossible here to enter; where the ground is enamelled it is frequently variegated with 'rosettes' in coloured enamel.

The enamelled objects produced at Limoges were both for



FIG. 49.—Morse enamelled in *basse-taille* on silver. Italian (Siena).
Fourteenth century.

religious and secular use. The largest were those made for tombs, of which that of William de Valence (d. 1296) in Westminster Abbey is a good example. The most usual objects made for churches were crosses, ciboria, pyxes, censers and incense-boats, croziers, relic-caskets (*châsses*), gospel-covers, and candlesticks. Secular objects include caskets and marriage-coffers, *gémellions* or pairs of shallow basins for the water used in washing the hands at meals

(p. 243), and the small shield-shaped pendants with armorial bearings (p. 5), usually attached to the trappings of horses. Good examples of all these are to be seen in the collection, and in the Victoria and Albert Museum. Enamelled work similar in kind to that of Limoges, and often influenced by it, was made in other districts and countries. In the fourteenth century this work was apparently produced in the north of France, and spread into the German area; the enamellers who in this century repaired Nicholas of Verdun's altar at Klosterneuburg, mentioned above, also made a ciborium with subjects enamelled in this style. Champlevé enamel on copper also occurs in Italy, though it was never popular in that country. Examples certainly of English origin are few, the destruction of church property in the sixteenth century having caused their disappearance. The medallions from Wardon Abbey, Bedfordshire, in the Table-Case, Bay XIX, may be cited; in the Victoria and Albert Museum are other examples for which an English origin may be conjectured. The shield on the arm of the brass of Sir John d'Aubernoun (d. 1277) at Stoke d'Abernon in Surrey is an applied plate of copper on which true enamel appears to be used for the armorial bearings. The shield enamelled with the arms of Gernon from Leeze Priory, Essex, in the Table-Case, Bay XIX, may have been used on a brass or on a tomb commemorating a member of that family.

Though champlevé enamel on copper was not entirely displaced after the thirteenth century, it soon lost its position of absolute predominance. The fourteenth century witnessed a great increase in the use of silver in the industrial arts, and the popularity of this metal led to a new style, known as *basse-taille*, or enamelling on sunk relief (see above, p. 75). The quality of silver in yielding reflections suggested the use of translucent in place of opaque colours, and experience soon showed how greatly the effect on such a base might be enhanced by sculpture in sunk relief, the richness of the colour varying with the depth.

Translucent enamelling on sunk relief rapidly won popularity in Italy and in the countries of western Europe, France, Spain, Germany, and England. It seems most probable that it was first produced in Italy. In that country fine work in this style is seen on altars and reliquaries at Pistoia, Orvieto, and Florence; the examples of its use on croziers, chalices, patens, devotional diptychs and triptychs, and small objects generally, are too numerous to mention. If Italy was the inventor of this work, it must have entered France through the papal city of Avignon; but Paris became the chief centre of French manufacture. As the inventories show, the process was extensively adopted for secular purposes, especially for enriching silver plate; its wide distribution suggests that goldsmiths worked at the new process in all the principal countries. The very large number of pieces of silver plate

enriched with this enamel in the English royal inventories of the fourteenth century make it probable that English silversmiths in London and elsewhere practised the method. All this plate has vanished ; but the cup belonging to the Corporation of King's Lynn and the Bruce horn are decorated with translucent enamels which



FIG. 50.—Enamelled stall-plate of Edward Seymour, Earl of Hertford, afterwards Protector. Dated 1537.

may well have an English origin ; the crozier and mitre of William of Wykeham, preserved at New College, Oxford, are similarly enriched. The names of two goldsmiths of London, Walsh and Chichester, are recorded as having made for Edward III a silver gilt cup with enamels, which must have been executed in *basse-taille*. The greatest splendour was attained when gold was substituted for silver as a base, and royal inventories, especially those of the

Valois princes in France, show many entries of cups and other pieces of plate enamelled on gold. Almost all these splendid objects are lost; one, however, has fortunately been preserved, though not in its original condition, and now forms one of the great possessions of the British Museum. This is the above-mentioned Royal Gold Cup of the Kings of France and England (p. 62) with the story of St. Agnes depicted on the surface of its bowl and cover, illustrating *basse-taille* enamel in its perfection.

Enamels on the round. In this variety the vitreous ornament is treated merely as an adjunct to plastic work in the precious metals, the enamel being applied to figures in high relief or in the round, a process offering considerable practical difficulties, but practised on a diminutive scale before our era by Greek and Etruscan jewellers. For the period before the sixteenth century, when elaborate enamelled jewels began to be made, enamel on the round is but scantily represented. But we know from the inventories of Charles VI of France (1380-1422) that the royal treasure contained much work in the precious metals enamelled in this way; the best-known example of this early period which has come down to us is the so-called *Rössl* of Altötting in Bavaria, a devotional group perhaps made as early as 1385, on the occasion of the marriage of Charles VI and Isabeau of Bavaria. It was, however, after the Renaissance that this method of enamelling was largely employed by the makers of pendants, jewels, and mounts for cups, who worked in Italy, Germany, and France. A sumptuous example of enamel on relief in gold is seen in the reliquary for a thorn of the True Cross in the Waddesdon Bequest (No. 67) which has been held by some to be almost of the same period as the group at Altötting, though the more general opinion places it later.

Enamel in openwork is unrepresented in the collection, and few fine examples have anywhere survived; allusion has been made above to the beaker in the Victoria and Albert Museum (p. 76).

The different processes of enamelling which had their great periods as above described all survived the Middle Ages and were practised by the goldsmiths and silversmiths of the Renaissance and later times, though they no longer possessed the predominant importance which they had formerly enjoyed.

We now come to the last division, *Painted Enamels*, in which elaborate compositions were reproduced by a new method, after contemporary engravings.

The beginnings of this method have been sought in the painting of glass windows at the close of the Middle Ages. But another theory traces it to a development of enamelling in the round: subjects, instead of being rendered in the various planes of sculpture, were set out on the flat surface of a picture. Whatever view as to origin may be adopted, enamelling now abandoned the old

traditions and conventions proper to it, and strove to emulate the processes of pictorial art. From some points of view this may be regarded not as progress but as a step backward; in place of an independent craft working out its own destiny by its own means, we have an art condemned to an almost servile imitation of engravings, its technical brilliance not compensating for its hybrid nature.

In the new style Limoges rose to a predominance even more



FIG. 51.—Enamelled brass candlesticks. English. Seventeenth century.

exclusive than that which it had enjoyed in the production of *champlevé* from the twelfth to the fourteenth century. But objects which may be regarded as precursors seem to have been made earlier in other places. They belong to the second half of the fifteenth century, and include small medallions attributed to Jean Fouquet, the early French painter (d. 1481), preserved at Paris, Berlin, and Dresden, the subjects here being *en camaïeu* in gold on an enamelled ground; two small plaques at Poitiers, with figures in costumes of about 1450, executed in colours on a black ground; and various objects of similar date, some of much larger

size. These appear to have been made on the Rhine, the most remarkable being certain goblets, now at Vienna and New York, resembling in form the nielloed beaker in the collection (plate XI). All this work shows that in different places, chiefly in France and Germany, experiments with enamel were being attempted. But the great period of painted enamel began at Limoges rather later in the century, though apparently after a long break in the practice of the enameller's craft in the city due to the troubles of the Hundred Years' War.

The earlier division of this period lasted for half a century, beginning about 1475 and ending about 1530. Several groups of enamellers have been distinguished, our knowledge of which has been largely increased by the recent studies of M. Marquet de Vasselot. Two of these groups are associated with individual masters, the others are as yet unconnected with any name, but all seem to have been contemporary, overlapping each other, and ceasing their activity about the same time. The two individual masters are the enigmatic 'Monvaerni', whose identity is still a matter of conjecture, and Nardon (Léonard) Pénicaud, the main facts of whose history are known. The work of the former, unrepresented in the collection, is often marked by a strong realism, by indifference to beauty, and by a harsh colour scheme, but at the same time by great vigour and individuality. It was to some extent influenced by Italy through north French and Flemish art, but is largely based on German models; thus the plaque in the Victoria and Albert Museum with St. Christopher copies a print by the German master E. S., who died in 1467 and chiefly worked at Strasbourg. Nardon Pénicaud, who was born about 1470 and died 1542-3, is the best known of the earlier enamellers. His style is natural though sometimes stiff, the drapery is well handled, the attitudes are expressive though the faces have little individuality. His colours, if restricted in range, are of great splendour, and he heightens the effect by adding foils under cabochon. He represents a generation brought up in 'Gothic' traditions, and saw only the beginning of that Italian influence destined in a few years to so complete a triumph. But Nardon Pénicaud's work, as we at present know it, ceased at the end of the first decade of the sixteenth century, and to the last he was using German prints as his models. The Museum is fortunate in possessing two important works by him, both included in the Barwell Bequest. The first, a panel with the Resurrection, is perhaps the oldest of his known enamels, and is an admirable example of his earlier style. The second is the great triptych with the Entombment between the Deposition from the Cross and the Resurrection (Pier-Case, Bay XIX, B, and plate VI); it reproduces prints by Schöngauer, and dates from about 1510, being thus one of the enameller's latest works. In this triptych the colours, especially



PLATE VI. ENAMELLED TRIPTYCH BY NARDON PÉNICAUD, ABOUT 1510.

the blues, are of superb quality, and the whole is magnificent in its effect.

During the half-century from 1530 to 1580, the Flemish and German influence declined, such traces of mediaevalism as still clung to the work of the earlier masters disappeared, and the influence of the Italian Renaissance became paramount. The

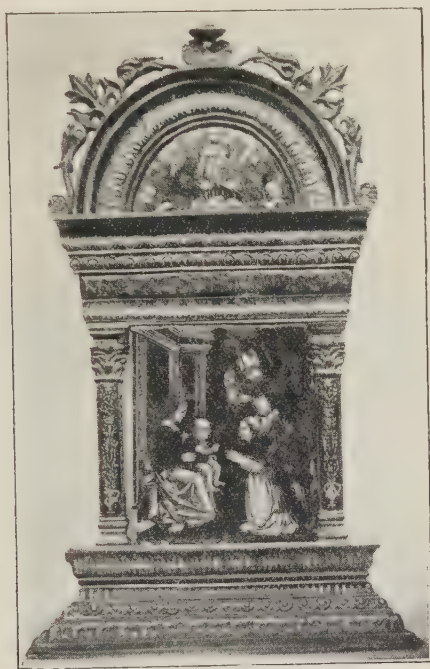


FIG. 52.—Pax with Italian painted enamel.
Sixteenth century.

scheme of colour was now less sumptuous, and the plates of copper employed were thinner and more convex. To this period belong the more familiar names, of which we can only make a brief mention. Jean Pénicaud I is still transitional, but Jean Pénicaud II (who often signs P. I., for Pénicaud junior) and Jean Pénicaud III definitely abandon the use of a white ground for the whole of their figures. Both were artists of merit, especially the last, who designed many of his own compositions, and was not content, like the majority of enamellers, to remain a copyist. The Pénicauds were the first to popularize painting in *grisaille*, i. e. the style in

which the figures are entirely or almost entirely executed in opaque white enamel on a black background. Many of their pieces have stamped on the back the monogram shown in fig. 53, which was the mark of their workshop and their school, and need not always imply their own participation in the work. Two artists, one known by the name of M. Pape as well as by various initials and monograms, and the other by the initials K I P, belong to the Pénicaud atelier. Both produced work, usually in grisaille, of the finest quality; examples by K I P are in Table-Case, Bay XIX. The collection contains several examples of enamels by Jean Pénicaud II; and the series of plates with the story of Psyche is ascribed to Jean Pénicaud III. A prolific artist, especially in grisaille, is Pierre Reymond, who is well represented. He was born at the beginning of the sixteenth century, and died about A. D. 1584. The few polychromatic enamels which he has left are thought to belong to his earlier period, during which he copied German designs. At the height of his career he was under Italian influence, but at the end of his life he reproduced the motives of famous designers of ornament like Étienne de Laulne, Du Cerceau, and De Bry. Over-production prevented him from doing full justice to his talent; his figures are often hard, and the effect marred by an excess of black shading, suggesting the methods of the wood engraver. His greater contemporary Léonard Limousin (b. about 1505, d. before 1577) fell under a similar succession of influences in the course of



FIG. 53.
The Pénicaud
Stamp.

a long career. He also painted figure-subjects in colours and in grisaille, for the former sometimes employing a white background; in Pier-Case, Bay XIX, C, are two panels by him with scenes from the life of St. Anthony. But he is chiefly known as an admirable painter of portraits, and has left numerous panels and medallions, usually with blue backgrounds, representing great personages of his time. They are somewhat hard, and less free in style than his decorative work; but when the difficulties of the process are considered, they must be regarded as works of remarkable fidelity and distinction. The Museum possesses good examples of his portraiture in the busts of Catherine of Lorraine and of a Youth, in the Waddesdon Bequest, and that of the dauphin, son of Francis I, in Pier-Case, Bay XX (plate XV). It must suffice to mention one other artist of this period, Couly Nouailher (Noylier), the first enameller of a family which continued to furnish representatives of the art during the seventeenth and eighteenth centuries. His grisailles are somewhat feebly drawn and archaic in style.

In the period between 1580 and about 1625 a decline set in, and the artists are of less excellence; but they still have a feeling

for rich colour, and their work is often finely decorative. Foils are used to excess, and both the backgrounds and the costumes of the figures are bright with rich green, blue, and purple tints. The enamellers who represent it chiefly belong to the families of Court, de Court, and Limousin, whose genealogies and relationships are often confusing. The Waddesdon Bequest is rich in works by these painters, especially by Suzanne de Court, whose



FIG. 54.—Enamelled panel. Limoges. Close of the fifteenth century.

dead white flesh tints are seen in strange relief amidst a profusion of rich colours frequently heightened by foil. The Barwell Bequest contains a fine tazza (Pier-Case, Bay XIX) and smaller works in the adjoining Table-Case. About 1625 a general decadence began. Great numbers of plaques and medallions were produced, frequently mere *objets de piété*, and distinguished by a hard scheme of colour in which an orange red is sometimes conspicuous. Little can be said in favour of these productions, which are faulty in design and insipid in their general effect. The enamellers chiefly belong to the families

of Nouailher or Laudin, and the best among them is Jean Laudin, an example of whose polychrome work is seen in Table-Case 1. It was probably a pupil of the Nouailhers who introduced painting in enamel into Russia, where it became a popular means of decorating bowls and cups with flowers, among which the tulip (cf. p. 141) is conspicuous (Table-Case 2). Painting in enamel was widely practised during the seventeenth and eighteenth centuries, chiefly to decorate small plaques used for ornamental purposes: a large German cup in the Waddesdon Bequest (No. 126) is covered with such plaques. Special mention should be made of the work of Jean and Henri Toutin, who in the second quarter of the seventeenth century painted in colours on a white ground, using gold as a base, and restricting themselves to objects of small size. It has been noted that a white ground had been sometimes employed by Léonard Limousin for his plaques, but Toutin with his smaller productions—watch- and locket-cases, diminutive plaques with portraits, &c.—was the real initiator of a style which was first imitated by the watchmakers of France (Blois) and other countries, and culminated in the fine miniatures of Petitot, Bordier, and Zincke. The work in all these cases was really over-glaze painting, the ground being finally prepared and fired before the miniatures were begun. Produced at a time when the art of Limoges had become insignificant, many of these small enamels, with their vigorous battle and other secular scenes, are all the more worthy of note. Two examples of Toutin's work are to be seen in Table-Case 1, while enamelled watch-cases of the seventeenth century are among the collection of watches in Table-Case, Bay XIV. In the eighteenth century gold snuff-boxes, étuis, &c., of beautiful finish and decorated with pastoral and other scenes in enamel were produced in great numbers in France. Similar work was done at Vienna, Dresden, and elsewhere. The well-known Battersea enamels which began to be made towards the middle of the century were inspired by the same spirit, and though eminently pleasing in effect, and often of spirited design, cannot claim to equal the French work in execution. At Battersea the base was not gold but copper, and the products of the factory founded about 1750 by Stephen Janssen were of the most varied description; toilette-boxes, sweetmeat-boxes, candlesticks, snuff-boxes, wine-labels, and all kinds of small objects are found in large collections such as that formed by Lady Charlotte Schreiber, now in the Victoria and Albert Museum. A small series of Battersea boxes and étuis is shown in Table-Case 2. The enamels made at Bilston and Liverpool were of a cheaper and coarser type, but assumed similar forms. In all three places the mechanical process of transfer-printing upon a plain enamel ground often took the place of design. Portraits in enamel, both miniature and of considerable size, were painted by W. H. Craft (d. about 1805) and Henry Bone, R.A. (1755–1834), whose work is repre-

sented. Bone reproduced portraits by Sir Joshua Reynolds and other artists, some of which are in the Wallace Collection. Enamelled portraits are frequent on French snuff-boxes of the period of the Empire. The collection includes a box with a portrait of Napoleon given by him as a present to the Hon. Mrs. Damer (p. 306).

The art of enamelling on metal, long neglected, has in recent times once more attracted good craftsmen; much excellent work



FIG. 55.—Enamelled Casket with the Labours of Hercules. Limoges. Sixteenth century. (Barwell Bequest.)

is being produced, in some of which we may trace the influence of mediaeval tradition.

FANS.

Fans were apparently known in Europe in the Middle Ages, and they are mentioned in French inventories of the fourteenth century as objects of female toilet. They were introduced into England in the reign of Henry VIII. The folding fan, said to have been used by the Japanese as early as the seventh century of our era, was probably, in view of the antiquity of the ecclesiastical *flabellum* (p. 96), known before the sixteenth century; although it is not represented in MSS. or on monuments earlier than the Renaissance, fragments

are said to have been found in the ruins of the Castle of Pierrefonds in France, in a position indicating an earlier date than 1422. Folding fans came into vogue in England in the first half of the seventeenth century.

Fans ornamented with painting or engraving are preserved in the Department of Prints and Drawings.

FIRE AND LIGHT.

The ordinary method of making fire in the Middle Ages was the striking or rubbing of a piece of flint against a steel, the latter being of various shapes, and often artistically mounted in bronze or silver. As early as the fourteenth century small wooden sticks dipped at one end in sulphur (examples in Table-Case, Bay XV) were used to obtain a flame more quickly from the tinder (inflammable material of various kinds, often rags or vegetable substances), already ignited by the flint and steel.

Friction-matches became common about 1830, when candles were generally superseding rush-lights. The burning-glass in the form of a lens of crystal was occasionally used in earlier times, especially for procuring the new fire at Easter.

Mediaeval houses and churches were illuminated by candles and lamps; but very few lamps other than those used in churches have been preserved. The larger kinds were often in the form of metal circles (*coronae*) pierced with holes in which small conical glass receptacles for oil were placed. Candles were of wax or tallow according to quality, and were made in wooden moulds. Though the candle is of great antiquity it is doubtful whether it was commonly used for domestic purposes before the sixteenth century.

A primitive form of taper made of rushes coated with wax survived down to about the middle of the nineteenth century. These rush-lights were fixed in iron holders of the kind shown in Table-Case, Bay XV, or, when used as night-lights, in the centre of metal drums, the sides of which were perforated with circular holes.

FLABELLA.

Fans were in use from Early Christian times to keep flies from the altar, whence the names subsequently given them, *muscatoria* or *muscaria*. Two were generally used, held by two deacons standing on either side, though in the West during mediaeval times one seems to have been regarded as sufficient. The almost invariable form both in East and West has been that of a hand-screen with straight handle and flat top, at first sometimes rectangular, afterwards round. But whereas in the East the top has always been a disk of metal, generally ornamented with cherubs'

heads, in the West it has been composed of linen, parchment, silk, or peacocks' feathers, the former materials allowing the fan in some cases to be folded when put away. Even in the West ceremonial *flabella* were made with silver or silver gilt disks at the top; these were preserved when their use had been forgotten and came to be known as *philaciae* or *phylacteria*; there are examples in the cathedrals of Hildesheim and Angers, at Kremsmünster, in the Hermitage Museum at Petrograd, and in the Collection Martin Le Roy, Paris. The handles were of carved wood, ivory (cf. the handle in Pier-Case, Bay XX, C), or, in the case of costly examples, of silver, sometimes enamelled. Flabella are mentioned in documents as early as the ninth century, and from the eleventh century to the close of the fifteenth are frequently named in inventories; thus St. Paul's, London, possessed in 1295 *unum muscatorium cum pennis parvum*. The flabellum began to be abandoned in the West at the close of the fourteenth century, though certain monasteries continued its use to a later time. The most perfect flabellum now preserved is that from Tournus, (Saône-et-Loire), now in the Museo Nazionale at Florence. It is of folding parchment, the handles of ivory richly carved, and is ascribed to an early period in the Middle Ages.

FORKS.

Forks, though known in more ancient times (Anglo-Saxon example found with coins of the ninth century, in Iron Age Gallery, Table-Case D 3), were not generally employed in the Middle Ages. During the whole period the fingers alone were used; this custom, together with that of two eating from one dish, made the careful washing of the hands before and after meals a necessity, and accounts for the important place in the domestic economy of ewers, basins (p. 243), and rose-water dishes. The daughter of Constantine Ducas, Emperor of the East, who married the Doge Domenico Selvo, is said to have used forks at the close of the eleventh century; and in the famous illuminated manuscript of Herrade von Landsperg (the *Hortus Deliciarum*, about 1130) they are twice represented. From the thirteenth century they are more frequently mentioned, though they were evidently intended for dessert and sweetmeats, not for eating meat. A fork occurs in the inventory of Edward I; but Piers Gaveston, favourite of Edward II, had only three or four forks to sixty-nine silver spoons, and these are described as used for eating pears. Forks in the inventory of Charles V of France (1379) are of gold, the handles set with gems, and were also intended for eating fruits only; they also appear in the inventory of his brother, the Duc de Berry (1416). At the end of the fourteenth century forks are first mentioned with spoons, but

they are still rarities, and of high intrinsic value. They do not appear to have been employed for eating meat until the sixteenth century, and even then the reform was not general in all countries. In England the fork was not commonly used until the first half of the seventeenth century, probably in imitation of the Italian fashion, as may be gathered from passages in Ben Jonson, Coryate, and other writers. Silver forks were only used in small sets even at the end of the seventeenth century, but it was then still the custom for each guest to bring his own, so that even large houses required few. To this custom was due the manufacture of folding-forks with hinged handles, easily carried in a case in the pocket (fig. 146). The ancient fruit-forks probably had only two prongs, and even the oldest dinner-forks only three. Four-pronged examples, though known in the first half of the eighteenth century, were not common before the reign of George III.

GAMES AND SPORTS.

Only a few games can be here mentioned, chiefly those illustrated by objects in the Museum collections. The wide subject of field sports, mentioned under *Arms and Armour*, and other knightly diversions of the Middle Ages, has of necessity been omitted; but attention may be drawn to the representations of sports and games upon the ivory mirror-cases and writing-tablets in Table-Case, Bay XXI. It will be noticed that hawking-scenes are specially popular, and that the rather boisterous games played in the halls of castles are represented by a guessing game like 'Hot Cockles' in which one of the players is blindfolded. The following short notes upon particular games or the apparatus with which they were played may be of interest.

In connexion with hawking, which fell into disfavour after the Civil Wars owing to the introduction of sporting fire-arms, a small gold *vervel* (Franks Room, Desk-Case) inscribed *Sum regis Anglie et Comitum Herfordie*, and belonging to Henry IV, should be noticed. Vervels were small flat rings, usually made in pairs, attached to the jesses or leather thongs by which the hawk was held on the fist. They were often of precious metal, and had the names of their owners engraved upon them as in the above example. Small globular bells were attached to the hawk's legs by leather rings called *bewits*; and when the bird was not flying a leather hood or cap was placed upon its head. Hoods, like vervels, are mentioned in inventories; some belonging to Henry VIII were set with rubies and pearls. The British Museum unfortunately contains no example of a mediæval hawk's hood.

The game of *chess* is first heard of in India, from which country it was introduced into Sassanian Persia. The Arab historian

Masudi speaks of it as already known to the Persians in the sixth century, and through Persia it passed into the Byzantine Empire. It had certainly reached Italy in the eleventh century; representations are seen on pavement-mosaics in the north of that country dating from about this time. It must soon have become familiar to the peoples north of the Alps, and may have become independently known to the Scandinavian navigators about the



FIG. 56.—Ivory chessmen from the Island of Lewis.

same time through direct intercourse with the East. The traditional stories, repeated in mediaeval romances, that the game was played by Charles the Great and his peers, are not considered trustworthy; and other evidence brought forward in support of Carolingian chess has not won universal acceptance.

Among the most ancient chessmen in existence are those found in 1831 on the coast of the Island of Lewis, dating from the twelfth century. They formed part of no less than seven sets, and a considerable number, acquired by the Museum in 1832, are exhibited in Table-Case, Bay XXI. A fair number of chessmen of

the later Middle Ages are in existence, a few being exhibited in the same case: in some instances the principal figures are of elaborate construction and form the centre of a subsidiary group, the whole being cut from the solid as in the case of the bishop there shown; but the wide diffusion of the game rendered necessary the use of simpler conventional forms, such as the Arabs had already employed, and these are usually seen represented in mediaeval illuminations, and were made of bone, jet, or other material. Such representations of chessmen and boards are frequent, for chess was a favourite game in the castles of the knights and nobles, and a knowledge of it was part of a gentle education. It lost some of its popularity at the close of the Middle Ages, partly through the introduction of card-games.

The queen in chess, known in the Middle Ages as the *fierce* or *ferce*, had been already introduced into Europe by the eleventh century, and is found in the Lewis sets; but in the Oriental game this piece was called the prime minister. In a similar way, in Europe, the bishop ultimately replaced the elephant, as his mediaeval names *auxin*, *alfyn*, &c. (der. *al pil*, or *phil* = the elephant) sufficiently show; but at different periods and in different countries an archer and a fool or jester have taken his place. The knight has undergone little essential change; but the history of the castle is more complicated. In the Lewis sets 'warders' or foot-soldiers with shields represent the castles; but an early form was an elephant with a tower on its back, and this has been retained in the north of Europe. In southern Europe, France, and England the tower was adopted without the elephant, and was conventionally represented with a bifurcating top, a form probably introduced by the Arabs. The piece was formerly known as the *rook*, the name being derived from an Oriental word, perhaps the Persian *rokh*, a hero.

Draughts. The game of draughts, or *dames*, though in existence throughout the period, is not mentioned by mediaeval writers so frequently as chess. Its origin is obscure, and it probably differed from the game as now played. A set of men from Taplow, perhaps dating from as early as the sixth century, is exhibited in the Iron Age Gallery, Wall-Case 50.

Tables was another popular game in the Middle Ages, and resembled our backgammon, being played with dice and pieces on a board marked with lines. As an aristocratic amusement it rivalled chess, and the MSS. have several miniatures showing people playing it. It still had the name of tables in Shakespeare's time (*Love's Labour's Lost*, Act v, Sc. ii), the name of backgammon coming in during the seventeenth century. Dice, which had been commonly employed by the peoples of antiquity, were used throughout the Middle Ages not only for backgammon, but for simple hazard; in the twelfth century, John of Salisbury

mentions ten distinct games with dice : the collection contains no dice known with certainty to be of mediæval date.

Cards were introduced into the west of Europe before the middle of the fourteenth century, probably from the East. A miniature in a French MS. in the British Museum (MS. Add. 12,228, fol. 313) written between 1330 and 1350 shows a royal party playing cards, and it appears that the pack of fifty-two cards were already in use at that period, although its composition was not definitely settled. This pack alone found favour in Spain, northern France, north Germany, England, and other European countries, while the south of France, south Germany, and Italy used side by side with it a pack of seventy-eight cards known as the combined tarot pack ; this seems to have been introduced in Italy in the fifteenth century as a result of fusion between the shorter numeral pack, and a series of emblematical designs called *tarocchi* or *tarots*. Cards were at first painted by hand, but in the fifteenth century they were marked by means of wood-blocks, and are among the earliest examples of printing. The large collection of playing-cards bequeathed by Lady Charlotte Schreiber to the British Museum is in the Department of Prints and Drawings, and is described in a Catalogue published in 1901.

Pall Mall, or *paille maille*, was a game played with wooden mallets and a ball of boxwood (fig. 57), and was introduced into England towards the earlier years of the seventeenth century. It had been played in France at an earlier date, but seems to have been introduced into that country from Italy, for in the carnival songs of Florence of about 1500 mention is made of *palca a maglio*, and Leonardo da Vinci in his notebooks mentions the game played with the mallet as worthy of the painter's observation for the study of the human form in action. The name itself is in favour of such an origin, being probably derived from the two Italian words *palla*, a ball, and *maglio*, a mallet. Though King James I in his *Basilicon Doron*, written for his son Prince Henry, recommends 'Palle Maille' as a pleasant



FIG. 57. — Mallet and ball for playing Pall Mall.

field game, its popularity in this country probably dated from the middle of the seventeenth century. In all likelihood the present Pall Mall marks the site where the game was played at this time; but after the Restoration, when it enjoyed its greatest vogue, a new Mall was made on the north side of St. James's Park which is frequently mentioned by Pepys. The surface was of well-levelled earth, while barriers were erected along the sides to keep the ball within bounds. The game seems to have consisted in striking the ball through an iron arch, or a ring suspended from a short stake, at each end of the Mall, the winner being the player who got his ball through arch or ring either in the smallest number of strokes, or in a number previously agreed upon. But in various early illustrations the arch or the ring is not a constant feature, and it is difficult to be sure what the nature of the goal really was. It is not known with certainty at what time Pall Mall went out of fashion, but it was probably in the first half of the eighteenth century. The mallet and ball shown in fig. 57 were found in an old house in Pall Mall in 1854, and were presented to the Museum by Mr. Vulliamy.

Golf seems to have been played at least as early as the early years of the sixteenth century; men are represented putting, in an illumination from a Flemish Book of Hours of that date in the Department of Manuscripts.

GEMELLIONS. See p. 243.

GEMS (Engraved).

The art of gem-engraving was continued in Early Christian times (*Guide to Early Christian and Byzantine Antiquities*, 2nd ed., pp. 134, 136, 183). It was not altogether lost in the West between the fall of Rome and the reign of Charles the Great, but is represented only by rare intaglio signets of seventh-century bishops under the Merovingian dynasty, and a few cameo heads of the same period, such as that on a reliquary in the Monastery of St. Maurice d'Agaune. There was a revival under Charles and his immediate successors, only to be followed by comparative neglect until the approach of the Renaissance in Italy. More than one Carolingian king had his signet engraved in intaglio; and of these seals several impressions remain, though only one original matrix has been preserved, that of Lothair II, King of Lorraine (d. 869), now set in the surface of an early mediaeval cross in the treasury of the cathedral at Aix-la-Chapelle. Crystal was the favourite stone of the Carolingian engraver, who carved in pieces of large size sacred scenes and subjects, principally the Crucifixion.

The British Museum is fortunate in possessing three such engraved crystals, two of which are Crucifixions of inferior workmanship, while the third, that known as the Crystal of Lothair, is the finest work which has come down to us from that age.

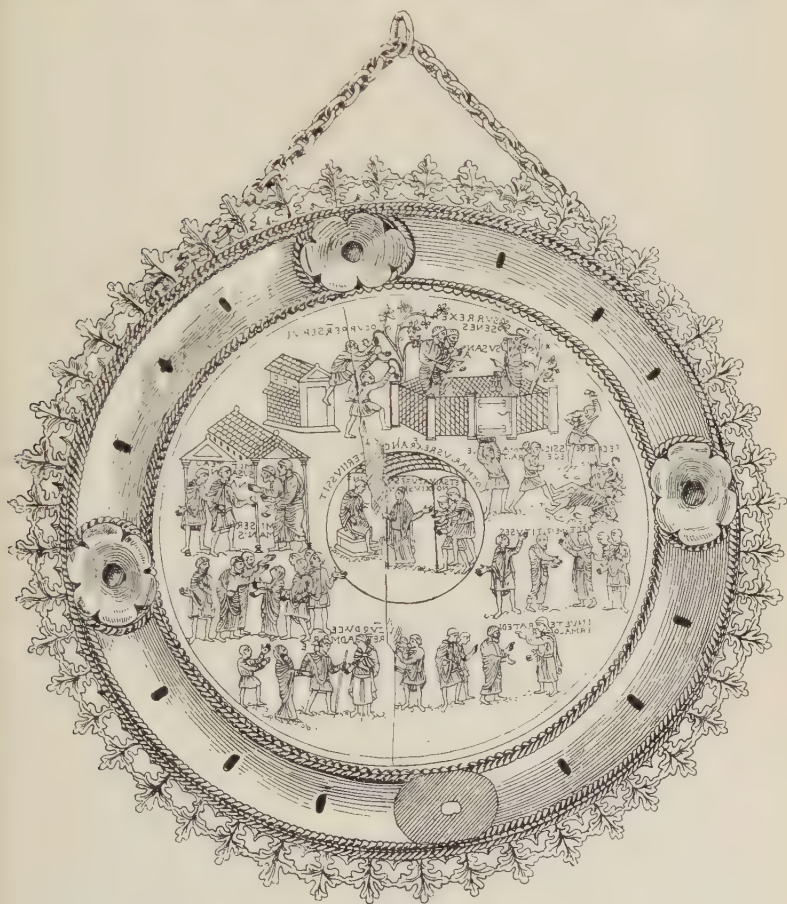


FIG. 58.—The Crystal of Lothair. Ninth century.

The inscription upon this remarkable object, which is a great lenticular disk now set in a mount of the fifteenth century (Table-Case 2 and fig. 58), states that it was made to the order of Lothair, King of the Franks, probably Lothair II; the subjects upon it, which are executed with great vigour and skill,

represent scenes from the story of Susanna. The history of this crystal is so remarkable that it must be briefly recounted here, for hardly any ancient jewel in existence has passed through such strange vicissitudes. In the first half of the tenth century, as we learn from the Chronicle of the Abbey of Waulsort (or Vaso, on the Meuse near Dinant), it belonged to the wife of Eilbert, Count of Florennes, in the present province of Namur. This Count, who was of a warlike disposition, gave it to a canon of Reims as a pledge for a fine horse which had taken his fancy at a fair. As soon as he had obtained the money to redeem the pledge, Eilbert went to the canon and asked for the jewel; but to his surprise was met with a denial of all knowledge that any such object existed. The Count, thwarted for the moment, went back to his home, summoned his retainers, and returned with a large force to Reims, whereupon the canon took refuge in the great church, and concealed himself so cleverly as to elude his pursuers. Eilbert then ordered the building to be surrounded and set on fire, which was immediately done, with the result that the delinquent, half-suffocated with smoke, rushed out into the very arms of the Count's men, and the crystal was found hidden on his person. The Count retained possession of it for many years, but when he became old he repented of the sacrilege which he had committed in burning the church, and presented it to a monastery which he had recently founded near his castle of Florennes. This was the Abbey of Waulsort, and there the jewel remained undisturbed for eight hundred years. But at the time of the French Revolution the monks were dispersed, and the Crystal of Lothair disappeared for more than a generation. At last, at some time near the middle of the nineteenth century, it was offered for sale by a Belgian dealer in antiquities, who said that it had been fished up from the bed of the Meuse. This story was probably true, as at the time of the Revolution the crystal may either have been thrown into the river by some one unaware of its value, or purposely dropped into the water by a monk who hoped by this means to preserve it from mischance and recover it on the return of happier times. It was purchased by a French collector for twelve francs, ultimately coming into the possession of the English collector, Mr. Bernal, at whose sale at Christie's in 1855 it was acquired by the British Museum. The jewel was probably cracked during the period of its disappearance.

If the numerous antique gems with pagan subjects ornamenting the surfaces of reliquaries and other objects of Church use from the tenth to the twelfth century show that engraved gems were valued, the small number of contemporary gems suggests that during this period the engraver's art was but little practised. Yet Theophilus (*see* p. 182), writing about 1100, alludes to gem-cutting in Italy; cups and vessels were being made out of

crystal, and impressions of seals on documents of the twelfth century show classical subjects apparently of mediaeval execution. For the thirteenth century there is evidence of greater activity, and more examples of contemporary work have survived. The Museum collection has two cameos, probably of this period, one representing Our Lord in the Garden, the other, three men in a ship; further examples are in the Cabinet des Médailles at Paris, while the former existence of others is proved by wax impressions upon documents. The first half of the fourteenth century is repre-



FIG. 59.—Cameo : the Entry into the Ark. From the collection of Lorenzo the Magnificent.

sented in the collection by a fine portrait head of a lady in jasper, set as a seal in a silver mount (Table-Case, Bay XVIII, and fig. 114). From the second half of this century the engraving of gems was more generally practised. The French royal inventories have numerous entries referring to contemporary gems, while two intaglio portraits, considered to represent princes of the House of Valois, are preserved; one in the collection has the head of the Duc de Berry (?) on sapphire, the other, in the Salting Collection at South Kensington, that of his brother Charles V on spinel ruby. The art was practised in Italy in the same century, and a fine cameo of the Crucifixion in the Vienna Museum is regarded as Italian work of

the time. The above evidence suffices to show that the art of gem-engraving, though not always flourishing, survived through the Middle Ages and was not suddenly recovered at the Renaissance. With the fifteenth century, we reach that period, and towards its close the revival of the glyptic art in Italy was complete: princes had begun to form collections of antique gems and to encourage contemporary artists to work in the same manner. The most famous collectors and patrons were Pope Paul II, Lorenzo the Magnificent (1462-92), for whom Giovanni delle Corniole (John 'of the carnelians') worked, and Piero de' Medici, his son. The gems of his collection were marked so that they can still be identified, and one of them, a very beautiful and early cameo



FIG. 60.—Cameo: René of Anjou.



FIG. 61.—Cameo: Giangaleazzo Maria Sforza (d. 1494).



FIG. 62.—Cameo. Thirteenth century.

(fig. 59), is exhibited in the South Table-Case in the Franks Room. The influence of Italy was soon felt beyond the Alps, especially at the court of René of Anjou in Provence, whose accounts mention various engraved gems, and, in addition, the names of two engravers, Thomas Pigne and Jehan Castel, one of whom may have executed the cameo head of this prince in the collection (Franks Room, Table-Case, and fig. 60). The French collections contain engraved gems of similar age ascribed to the north of France. With the sixteenth century, patrons increased in number throughout Europe, and the production of gems largely increased. Cameos were also executed in shell, and small reliefs in pearl-shell, though without varied strata, have in their style an affinity to work in hard stone.

The gem-engravers of the Renaissance derived their subjects in great part from contemporary paintings and engravings, though in part they were inspired by the antique. But in the latter

case they were never mere copyists, and infused into their work a naïve and original spirit which as a rule renders their gems readily distinguishable from those of classical antiquity. They further differed from their classical predecessors in frequently introducing groups of numerous figures, whereas the classical artist severely restricted the number of persons represented. Among the better-known engravers of the period are, in addition to Giovanni delle Corniole already mentioned, Michelino, working for



FIG. 63.—Cameo portrait. Italian. Sixteenth century.

Leo X, Giovanni Bernardi di Castel-Bolognese (d. 1555), for Clement VII, Valerio Belli (Il Vicentino), for Clement VII and Paul III, Alessandro Cesati (d. c. 1561), and Matteo del Nassaro (d. 1546), who was in the service of Francis I. The last-named formed a French school to which Olivier Codoré and others belonged. In the seventeenth century the lavish use of engraved gems for personal adornment diminished. The engraver's art declined, and in comparison with those of the Renaissance the gems of this century are often feeble and negligent in execution. But from the middle of the eighteenth century there was a great revival, due to an increased appreciation of Greek and Roman antiquities and to such events

as the discovery of Herculaneum; this improved condition of affairs lasted well into the nineteenth century, not coming to an end until about 1840, when the art of engraving gems almost died out. The great characteristic of this period is its extremely close imitation of the antique. So accurate is this imitation, and so well is the spirit of the model often rendered in the best work, that gems of eighteenth-century origin have been mistaken for works of the Augustan age, the style of which they reproduce. The models of which the artists now availed themselves were statues and busts as well as ancient gems; and the work was often

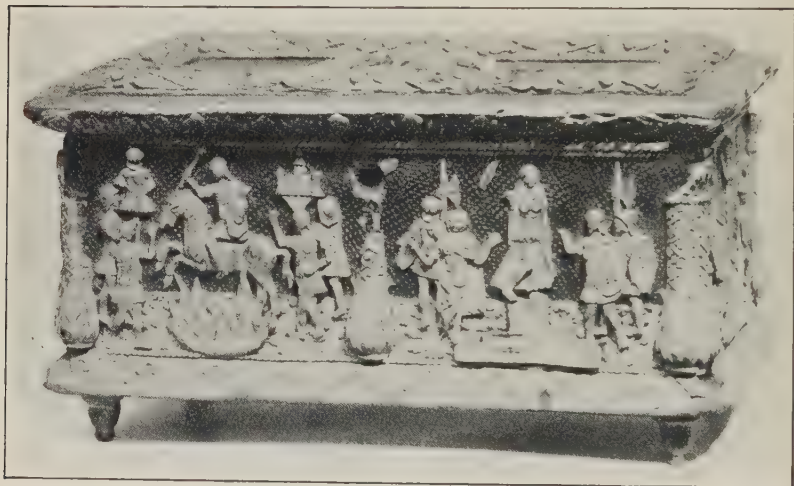


FIG. 64.—Casket with gesso ornament. North Italian. Sixteenth century.

signed with the real or supposed name of an antique engraver. Sometimes the imitator signed with his own name in Greek characters: thus the members of the Pichler family sign their gems ΠΙΧΛΕΡ. Signatures were occasionally added to genuine antique gems to enhance their value. Among the names of gem-engravers who achieved distinction during this later period were the Italians Amastini (fig. 213), Girometti, Sirletti, Santarelli, and Pistrucci, the last living in England and also working as a medallist: the Frenchmen Jacques Guay (d. 1787), the brothers Simon (d. 1821 and 1834), and Louis Siriés; the Tyrolese Anton Pichler (d. 1779) and his sons Johann (d. 1791) and Luigi (d. 1854); and the English artists E. Burch, R.A. (d. 1814) (fig. 213), and N. Marchant (d. 1816) his pupil. The collection contains gems by most of these engravers (Franks

Room, South Table-Case). A large collection of glass pastes and sulphur casts from ancient gems in various collections of Europe was formed by the Prussian Baron Stoseh : these were ultimately purchased by the Scottish modeller James Tassie (d. 1799) to be used for his own glass reproductions, which were numbered by thousands. Examples of his work are to be seen in most large collections, and the British Museum has a considerable series in the Department of Ceramics (Table-Case and frame on pier, Bay III, in the eastern half of the King Edward VII Gallery).

GESO.

Gesso is a composition of whiting mixed with glue to give it consistency. The modelling of gesso in relief may have been introduced into Italy about the thirteenth century, as Theophilus does not mention it ; Vasari in his life of Margaritone records that this painter formed diadems and other ornaments in relief upon his pictures. In the succeeding period moulded gesso, painted and coloured, was freely applied to wood, and was especially popular in the fourteenth and fifteenth centuries. The Italian caskets in Pier-Case, Bay XV, E, F (fig. 64), are pleasing examples of this kind of work.

GIMMEL RINGS. *See p. 150.*

GLOVES. *See p. 53.*

GOA STONES.

These spherical or egg-shaped balls, generally gilded, are composed of various drugs (calomel, musk, &c.), small portions of which were scraped off and taken in water as a remedy for abdominal complaints. They owe their name to the fact that they were made at Goa, the Portuguese settlement on the west coast of India in the pharmacy of the Jesuit College of St. Paul. The value attached to them is shown by the quality of the openwork cases in which they were occasionally enclosed ; silver was frequently employed, more rarely even gold ; an example in the latter material is preserved in the Franks Bequest. The name of Gaspar Antonio is mentioned in connexion with their manufacture.

GRYPHONS' CLAWS.

The belief in the existence of the fabulous gryphon of more ancient times was general in the Middle Ages and even after the Renaissance. The gryphon of the Greeks was a monster with

the head of an eagle and the body of a lion, and so it still appears in the bestiaries, and in numerous textiles or sculptures of the Romanesque period. Popular fancy, however, imagined that it laid eggs, and the eggs of the ostrich are freely ascribed to the gryphon in mediaeval documents. The horns of all kinds of animals, serving as drinking-cups, or reliquaries, were described as gryphons' claws; the ibex horn in Pier-Case, Bay XVI, B (fig. 65), as the inscription on its sixteenth-century silver mount records, was formerly (with another) in the Shrine of St. Cuthbert at Durham, where three 'griffins' eggs' were also preserved. The inventory

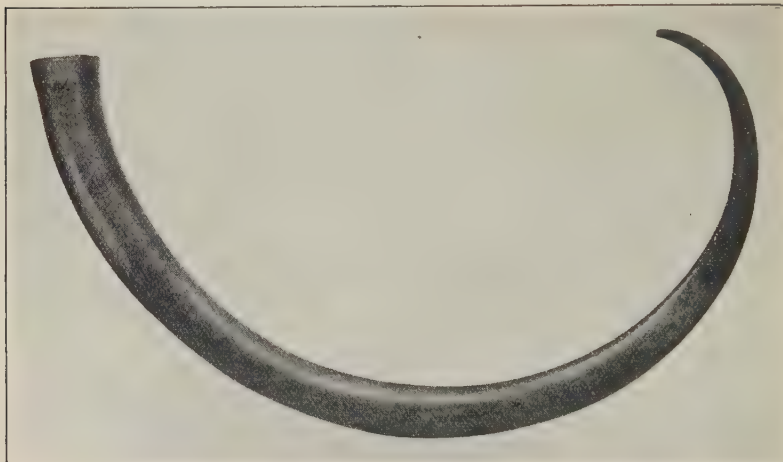


FIG. 65.—Ibex horn, formerly described as a gryphon's claw.

made by Richard de Segbrok, Keeper of the Shrine in 1383, mentions both the claws and the eggs.

GLASS. (Department of Ceramics and Ethnography.)

GYPCIÈRES. *See* p. 142.

HALL-MARKS.

The most essential facts with regard to the marking of plate in Great Britain are as follows. The most ancient mark is the crowned leopard's (lion's) head derived from the royal arms and prescribed by statute in 1300. It is probably to be regarded as a standard mark rather than a hall-mark peculiar to London, where, except between the years 1697 and 1720, it has always

been used on silver. In 1363 it was enacted by statute that each goldsmith should have his own mark to be set on all his work after it had been assayed. Some of the early makers' marks were signs, but from about the beginning of the seventeenth century initials became general. The most important of all marks, the date-letter, which makes it possible to assign a piece of plate to a definite year, though not mentioned in documents until 1597, was in existence at any rate by 1478. Date-letters are successions of alphabets each of twenty letters, J, U or V, W, X, Y, and Z being omitted. The style of the characters varies, no two series of similar letters following each other, and discrimination has been rendered more certain by the enclosure (since 1560-1) of the letters of each alphabet in escutcheons of distinctive form. The familiar lion passant is not known as a regular mark earlier than 1545; since then it has been continuously used on standard silver. Between March 27, 1697, and June, 1720, a lion's head erased and a figure of Britannia were introduced on silver in place of the



FIG. 66.—Hall-mark from an English silver spoon, 1639.



FIG. 66A.—Hall-mark from silver gilt cup, 1799.

leopard's head and lion passant, to mark the raising of the standard for silver plate. In the latter year the old lower standard of 11 oz. 2 dwt. fine was restored, and with it the two old marks; the lion's head and Britannia are rarely found after 1732, but when silver of the higher standard is made they are still employed. The head of the reigning sovereign has been stamped upon all dutiable silver, except objects of certain specified classes, since 1784. Down to 1798 gold had been marked in the same way as silver, but in that year a crown and the figures 18 were authorized for gold of 18 carats in place of the lion passant. Gold of 22 carats continued to be marked like silver until 1844, when a crown and the figures 22 were introduced instead of the lion. Assay towns other than London have all their separate marks and date-letters, so that an extensive knowledge, or the constant use of printed tables, is necessary for the identification of their silver. Thus Edinburgh has a castle; Glasgow a castle or (from 1819) a tree, fish, and bell; York has as its old mark, a fleur-de-lys and a leopard's head crowned, both dimidiated and conjoined on a circular shield, as its new mark the city arms; and so on. The marks on foreign plate may best be identified with the help of M. Rosenberg's comprehensive book.

HEART CASES.

The practice with which these objects were associated, the burial of the heart apart from the rest of the body, seems to have been a very ancient one, and was not uncommon in the Middle Ages. In 1838 the double lead case containing the heart of Richard, Cœur de Lion, inscribed *hic iacet cor Ricardi regis Anglorum*, and lined with a thin sheet of silver, was discovered under the pavement of Rouen Cathedral, where he had desired that it should be placed. The familiar story may be recalled of the heart of Robert the Bruce (d. 1327), which he had directed Sir James Douglas to convey to the Church of the Holy Sepulchre at Jerusalem. Douglas went out of his way to fight against the Moors in Spain and was there killed, but the heart was found hanging round his neck in a silver casket, and was ultimately brought to Melrose Abbey. Structural alterations at Winchester Cathedral in 1912 brought to light lead heart-cases of Bishops Audemar, or Aymer de Valence (d. 1260, at Paris) and Nicholas de Ely (d. 1280, buried at Waverley Abbey, Surrey). Heart-burial was forbidden by Pope Boniface VIII (1294-1304), but the prohibition was withdrawn by Benedict XI. In England the last instance of ceremonial heart-burial took place in 1775.

In the collection (Table-Case, Bay XVI) is a lead case which, according to the inscription, contained the heart of Sir Henry Sidney (d. 1586), Lord President of Ludlow Castle in the reign of Queen Elizabeth.

HAND-WARMERS.

These openwork spheres of metal were known by various names (*pilae calefactoriae*, *chauffirettes*, or *chafing balls*). In the interior is an arrangement of rings suspended in such a manner on gimbals that the cup containing the fire (probably of charcoal), or red-hot ball of metal, should remain upright in any position. They were especially used by priests during the celebration of the mass, for on winter mornings, in buildings never heated, their fingers were apt to be numbed by the cold (example in Table-Case, Bay XV). Hand-warmers are often mentioned in mediaeval inventories, and were doubtless used by laymen as well as by priests. Thus examples occur in the inventories of the Duc de Berry in France, and of Henry V in England.

HAUBERKS. *See* p. 11.

HELMs. *See* p. 11.

HISTORICAL RELICS.

The following are the more important among the objects associated with historical personages.

Table-Case, Bay XVI.

Quadrant, with the badge of Richard II; quadrant designed by Sir John Cheke for Edward VI; astrolabe of Henry VIII;



FIG. 67.—Small silver casket with arms of Margaret, Queen of Edward I, and Isabella as the betrothed of Edward Prince of Wales.

astrolabe of Prince Henry, eldest son of James I. Silver gilt casket with the arms of Margaret, queen of Edward I, and Isabella, the betrothed of Prince Edward, afterwards Edward II; probably a gift of Margaret to Isabella. State sword of Edward Prince of Wales as Earl of Chester (p. 230). Silver medallion engraved, probably by Simon van de Passe, with a map, showing on one side the voyage of Sir Francis Drake, 1577-80.

Table-Case, Bay XVIII.

Silver seal of Joanna, daughter of Henry II ; seals of the Duke of Bedford, Regent of France (d. 1435), and of Sir Walter Raleigh.

Central Table-Case 2.

Crystal medallion engraved in intaglio, made for Lothair II (*see above*, p. 103).

Franks Bequest Room.

Royal Gold Cup (p. 62), in centre of room. Cups of Lord Burghley and Sir Nicholas Bacon (p. 65) in Case D. Gold vervel (p. 98) belonging to Henry IV ; prayer-book in an enamelled gold cover, said to have been used by Queen Elizabeth, and the signet-ring of Mary Queen of Scots, in the central Desk-Case.

HORN-BOOKS.

A horn-book is a leaf or page from which children were taught reading ; on it are usually printed the alphabet, simple syllables, the figures 1-9, and the Lord's Prayer. It was set in a handled frame, commonly of wood, but sometimes of ivory, silver, and other metal, and protected by a sheet of transparent horn to keep the page clean (example in the Franks Bequest, fig. 68) : the term 'horn-book' was commonly employed even when the actual horn was absent ; a brass specimen used in St. Paul's Infant School, and dated 1729, is exhibited in the Window-Case, Bay XV. Stone matrices have been discovered, from which lead horn-books were cast. Though pages with letters written upon them must have been used at an earlier time for the same purpose, the first record of an actual horn-book dates from about 1450. But these simple aids to learning do not appear to have been used in great numbers until the latter part of the sixteenth century, when references in contemporary literature become frequent. The earliest existing horn-books are printed in black-letter and are extremely rare ; but even those of the two following centuries are now most difficult to find, probably less than two hundred out of the many thousands once made having escaped destruction. They were finally displaced by spelling-books in the earlier part of the nineteenth century. For about the last hundred years of their existence horn-books were imitated in gingerbread made in wooden moulds. They do not appear to have been in vogue to the same extent on the Continent as in England. There are several horn-books in the Department of Printed Books, and in the Victoria and Albert Museum at South Kensington.

HORNS.

Horns, usually of a single curve, were made of various materials, especially of bronze, ivory (*oliphants*, p. 118), the horns of animals.

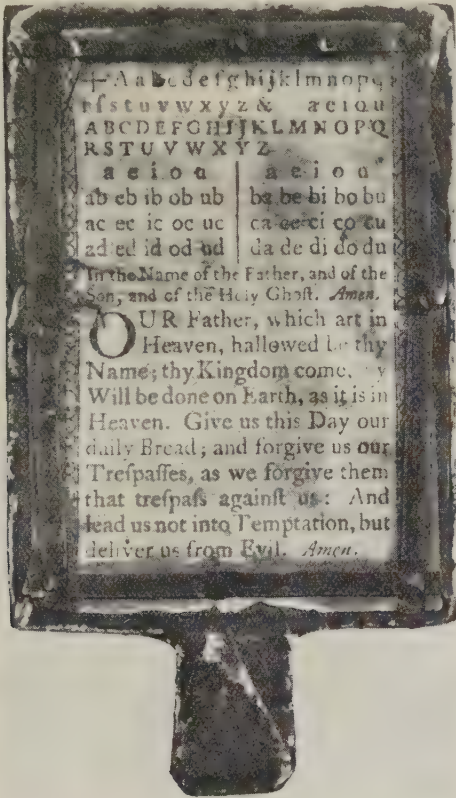


FIG. 68.—Horn-book. Eighteenth century.

and wood. They were worn suspended from one shoulder by a strap. Such horns were not only used in hunting and as drinking-vessels (p. 64), they served also as instruments for marking the tenure of certain offices, and summoning the burgesses in many English boroughs (*moot* or *mote horns*). And ancient examples are

preserved among the corporation plate and insignia of cities, in churches, or in private hands. Well-known examples of tenure-horns in Britain are the ivory horn of Ulph in York Minster (twelfth century), and the ivory Bruce horn, enriched with translucent enamels on silver (fourteenth century); the oldest moot horn is the latten example at Dover (thirteenth century). The long straight trumpet with bell mouth was also used, and is frequently seen in illuminated miniatures representing the Apocalypse.

HORSESHOES.

It is difficult to obtain accurate information as to mediaeval horseshoes: probably, as Sir W. Ridgeway suggests in his *Origin and Influence of the Thoroughbred Horse*, most horses went unshod, there being no hard roads in the country by which their hoofs could be damaged. Good evidence points to the use of iron horseshoes in the Roman period, and examples have been found in France under conditions which make a Roman date almost certain. The small shoes with wavy exterior edges, which have frequently been excavated, are probably of this age, and the shoes found at Silchester must date from the Roman occupation. No doubt the use of iron horseshoes, when once introduced, went on continuously, as is suggested by their representation on mediaeval seals; but when roads ceased to be paved with hard flags in the Roman style, it would no longer be necessary to shoe beasts of burden to the same extent. A horseshoe in the collection made on the occasion of the visit of the Bishop of Peterborough to Oakham, Rutland, in 1690, recalls a custom, said to go back to the time of Queen Elizabeth, by which a peer passing through the town was compelled to give a shoe from the foot of one of his horses as homage to the Lord of the Manor. The earliest form of shoe was doubtless a kind of slipper, first perhaps of hemp, like those worn by Roman oxen in the first century B. C., afterwards of leather with a metal ring at the bottom. The now familiar shape may have been reached by cutting away the unnecessary part of the ring over the heel. It is uncertain where iron shoes fixed with nails were first used, whether south of the Alps, or among the iron-working Celts north of that chain. Perhaps they were not generally employed until about the fourth century of our era.

INCENSE-BOATS. See p. 36.

IVORY CARVINGS.

Ivory has been a favourite material for sculpture in all ages; and whether obtained from the tusk of the mammoth or elephant

or from the teeth of the walrus or the sperm whale, has tempted the carver by its durability and by that closeness of grain which fits it for work of fine detail. Long before the beginning of history, the inhabitants of the French caves were able to carve ivory with figures of animals (*Guide to the Stone Age*, 2nd ed., plate II), and every great civilization in its turn, ancient Egyptian, Assyrian, Mycenaean, Greek, Etruscan, and Roman, has left carvings in this material, examples of which are to be seen in the various departments of the Museum. We are here concerned only with ivories of the Christian Era.

The principal objects made of carved ivory at the beginning of the period were caskets, and writing-tablets opening like books, coated with wax on the inner sides to receive inscriptions written with a stylus. The former had been chiefly employed in pagan time for ladies' jewels, but also to contain the grains of incense for the altar; these were now made to serve as pyxes (p. 220) or as reliquaries. From the writing-tablets were derived larger and more ornate tablets for use on special occasions, of which the *consular diptychs* were the most remarkable. These diptychs (a few casts in the Christian Room, Cases 3 and 4) were sent by consuls to important personages as a formal notification of their accession to office, much as rings were distributed by sergeants-at-law in our own country (p. 153), and the usage



FIG. 69.—Ivory panel. Tenth century.

was continued until the abolition of the consulship in A. D. 541. Many consular diptychs were afterwards preserved in churches, and inscribed with lists of bishops, benefactors, saints, and martyrs, or prayers to be recited during services. Sometimes, especially in the case of the large composite type, each leaf of which was formed of five separate pieces, they were adapted for use as covers for books of the Gospels. In the latest development of the diptych the old practice was reversed, and the interior surfaces were carved while the exterior surfaces were left plain. Diptychs of this kind were made simply as aids to devotion, and were the commonest form produced in the Middle Ages, though writing-tablets lined with wax continued to be used until paper became generally accessible (examples in Table-Case, Bay XXI. and see p. 250). But in addition to caskets, tablets, and their derivatives, Christian artists introduced forms hitherto unused. The most conspicuous of these was the pastoral staff, which, either in the form of the crozier or the tau-cross, was, from the eleventh century onward, often made of ivory, while in the earlier centuries of the Middle Ages the elaborately-carved combs used for combing the hair of high ecclesiastics before celebrating the Mass were usually made of the same material. About the same period, small ivory *situlae*, or buckets for holding holy water, were also made. Horns of ivory, known as *oliphants*, were produced in considerable numbers between the tenth and twelfth centuries, the character of their ornamentation, which generally consists of animals and monsters within scrolls, pointing in many cases to an oriental origin. Some were converted into reliquaries; others were used as tenure-horns, a most interesting example being the horn of Ulph, preserved in York Cathedral. The handles of *flabella*, or fans (p. 96), were also carved of ivory: part of such a handle is to be seen in Pier-Case, Bay XX. C. Crucifixes of ivory were made in the Middle Ages, but very few have survived to our time, the majority of ivory figures representing Christ upon the cross dating from the sixteenth century or later. For secular purposes, the Middle Ages used ivory occasionally for the matrices of seals (p. 165), and constantly for chessmen, draughtsmen, the writing-tablets already mentioned, the cases of circular portable mirrors, and for caskets: examples of all these objects are shown in Table-Cases, Bays XX and XXI. The ivory cups and flagons with figures in high relief were made in the seventeenth and eighteenth centuries; in the latter century ivory was employed for a host of small ornamental objects such as snuff-boxes and graters.

In the Early Christian Period carving in ivory was practised in all the wealthier provinces of the Roman and Byzantine Empires. Though Rome was not wholly inactive, the principal centres from the fourth to the sixth century were in the Christian East, where, especially in Egypt, Syria, and Asia

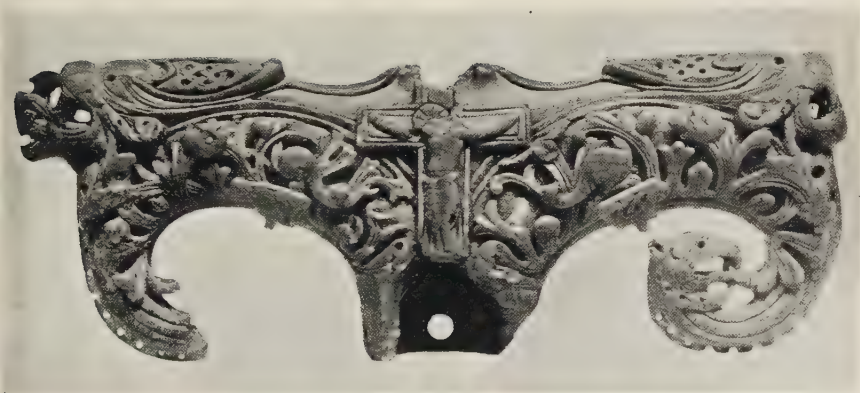


PLATE VII. ENGLISH TAU-CROSS, ELEVENTH CENTURY.

Minor, large numbers of ivories with religious subjects were produced. Many of these found their way into Western Europe after the fall of the Roman Empire ; like manuscripts, they were imported by monks, merchants, and pilgrims, and were preserved principally in monasteries. In Merovingian and early Anglo-Saxon times, the effect which they produced upon local art was small, because it was an art of formal ornament, while the majority of ivories were then carved with figure-subjects largely inspired by illuminated manuscripts. But in our own country at the close of the seventh century an influence of ivory carvings upon the

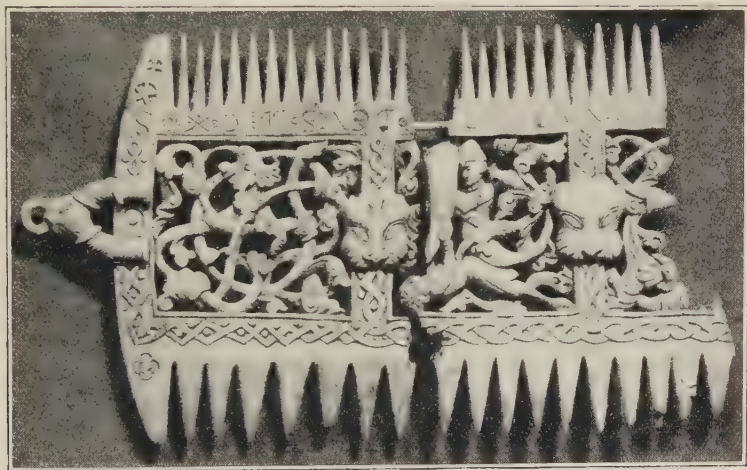


FIG. 70.—Ivory comb. Eleventh century.

sculpture of the Ruthwell and Bewcastle high crosses is possible, Benedict Biscop having brought works of religious art from Rome to Northumbria. The Franks Casket (*Guide to Anglo-Saxon Antiquities*, p. 96), though actually of whale's bone, shows that native artists were themselves capable of carving in ivory. The general introduction by the Carolingian Renaissance of figure art largely increased the importance of ivories, and they were imitated by the monastic artists working in the great abbeys of the Frankish Empire. While in Italy, as a result of Lombard rule, sculpture had sunk to a low level, and in the Byzantine Empire development was checked by the iconoclastic dispute, ivory carving revived with the other arts in the dominions of Charles the Great ; and as monumental sculpture was at the time neglected, this diminutive work possesses an exceptional value for

the history of art. The style of the Carolingian ivories betrays the sources from which their inspiration was derived; and in the scenes chosen, the grouping of the figures, and the treatment of features or drapery we can trace an Early Christian, Byzantine, or English inspiration largely transmitted through illuminations in sacred books. Light has been thrown on the affinities of the different schools of Frankish ivory carvers by the recent exhaustive study of pre-Gothic ivories by Prof. A. Goldschmidt.

In the tenth century, while France, distracted by internal troubles, only produced degenerate work in the manner of the preceding age, there was a revival in Germany, partly due to the stable government of the Saxon emperors, partly to more direct relations with Constantinople. At the close of the tenth century, when the Ottos occupied the Imperial throne in the West, Byzantine ivories found their way to the north-west, and their influence is very perceptible in German work. But imitation did not result in slavish copies, and the various schools of German ivory carvers between the tenth and twelfth centuries are characterized by an individual treatment. Byzantine compositions were adopted, but the style is Western. The panel in the Trivulzio Collection at Milan, representing the Emperor Otto I and his family at the feet of Christ, is based upon Byzantine models, but the manner is German, and recalls that of a plaque in the Museum Collection (Table-Case, Bay XX) representing the raising of the widow of Nain's son.

In our own country the ivory carvings produced in the later Anglo-Saxon period are marked by the individuality and liveliness of expression remarked in the drawings in contemporary MSS. The ivory seal of Godwin the Thane (Iron Age Gallery, Table-Case, D, 3) has on a projection from the rim a group in high relief representing the Trinity, of remarkable merit. The Museum at Winchester possesses a small but very beautiful panel with two angels, found at St. Cross, and showing the inspiration of the Winchester school of illumination which flourished in the tenth and early eleventh centuries. A Nativity in morse ivory in the Mayer Collection in the Liverpool Museum, not far removed in date and with the same relationship to miniatures of the Winchester School, is a worthy companion to this panel. The wonderful tau-cross in the collection (Table-Case, Bay XXI, plate VII), found at Alcester, must have been produced under the same influences early in the eleventh century. The crozier from the Webb Collection in the Victoria and Albert Museum, covered with figure-subjects conceived with a freshness and executed with a virility without a parallel among other ivories of the earlier eleventh century, again recalls MSS. of Anglo-Saxon origin. Other ivories which have been ascribed to Anglo-Saxon carvers are the large panel with the Adoration of the Magi at South Kensington, and a smaller plaque with the same subject in the

Louvre at Paris, and the pen-case and knife-handle with decorative designs in the collection (No. 37). The quality of all these examples proves that the ivory carvings produced in the Anglo-Saxon period were worthy of the illuminations which inspired them; the key-note of both is originality.

During the same period the Arabs attained great skill in ivory carving, especially in Spain, where they produced inscribed caskets ornamented with animal forms and acanthus designs in high relief.



FIG. 71.—Ivory draughtsmen. Twelfth century.

Most of these are preserved in Spain and France, where they have usually served as reliquaries, but this work is finely represented in the Victoria and Albert Museum. The *oliphants* (p. 118) which came into Europe about the same time are considered to be partly oriental, partly Byzantine, and partly early Western copies of these two classes; the origin of individual examples is often very difficult to determine. It was at this time, between the ninth and twelfth centuries, that Byzantine ivories reached their highest perfection. The ninth century was still affected by the dislocation of religious art caused by iconoclasm, and much of its work was of a secular character, consisting of caskets with classical subjects, or

subjects in a pseudo-classical style, probably copied from antique silver plate and from manuscripts (two panels in Table-Case, Bay XX). But from the close of the century religious subjects again predominated, and a large number of diptychs and triptychs, or simple leaves from these, are to be seen in European collections, many having been carried away from Constantinople after the sack of the city by the Crusaders in 1204. The best Byzantine work had already been produced a hundred years before this event. Two fine examples, a reliquary at Cortona, and the central panel from a triptych at Paris, are dated by the names of the Emperors mentioned in their inscriptions, the first referring to Nicephorus Phocas (963-9), the second to Romanus IV and his wife Eudocia (1068-71). The carvings of the best period (tenth and eleventh centuries) are marked by purity of feeling and singular refinement of execution. Hellenistic traditions derived through the illuminations of manuscripts predominate in this work, though the fine convention of a religious art tempers the excessive naturalism of the Graeco-Roman style. A fine Byzantine ivory carving of this time can be compared with nothing but the best work of the French carvers in the thirteenth century. Where decorative designs are introduced, as sometimes on the backs, oriental influence is apparent. Architecture plays a less prominent part than in the earlier ivories made in the Christian East in the fifth and sixth centuries: single figures of saints between columns surmounted by arched niches are not so frequent, though canopies, often pierced, are placed over whole groups; the scale of the figures and of the panels themselves is generally smaller. The large panels used for great diptychs and book-covers have disappeared, and are replaced for the most part by smaller diptychs and triptychs made for purely devotional purposes, with subjects almost entirely derived from the lives of Our Lord and the Virgin, or figures and busts of the saints. Old Testament subjects seem to have survived chiefly upon the caskets made about the iconoclastic period: two panels from such a casket with scenes from the story of Joseph are exhibited in the Table-Case, Bay XX. Like the Western ivory carvers in the Middle Ages, the Byzantine sculptors were in the habit of colouring and gilding their work, though not, perhaps, to the same extent. Though represented by interesting examples, this second period of Byzantine art is not as well illustrated in the Museum Collection as could be desired.

In the full Romanesque period ivories lose some of the importance for the history of art which they had possessed during the earlier centuries. In those ages monumental sculpture was rare, and the diminutive carvings teach us almost all that is to be learned as to the condition of plastic art in Europe. But from the eleventh century the churches and cathedrals began to receive a rich decoration of sculptured reliefs. Sculptors of ability now

devoted themselves to work on the larger scale, and as the number of surviving ivory carvings of this period is comparatively small, it may be that the increased opportunities offered in this new field caused a certain neglect of the minor art, though the contrary effect might as well have been expected. We have already spoken of Anglo-Saxon ivory carving (above, p. 120). In France and Germany the Carolingian tradition was slow to disappear. Transitional between the late-Carolingian tradition and the Romanesque is the large panel exhibited in the Table-Case, Bay XX (fig. 69), with sub-



FIG. 72.—Carved ivory fragment in pierced work from St. Albans. Twelfth century.

jects from the life of Christ, closely related to the famous diptych of St. Nicaise in the Cathedral of Tournai and a casket in the same style in the Berlin Museum. By the end of the eleventh century a distinct tendency to originality of treatment begins to be manifested, and even where the subject in general conforms to Byzantine requirements, details of costume or physiognomy attest the reawakening of an original Western art. The ivories used to heighten the effect of Rhenish enamelled reliquaries of the late twelfth century are, indeed, of little merit, and were probably made at Cologne (examples inserted in the portable altar, Pier-Case, Bay XVIII, and plate XIII); the panels from caskets with figures in very high relief (Table-Case, Bay XX) reveal more energy and sense of life. Some Romanesque ivories assigned to

France, though less ugly, show a tendency to over-elaboration and excess of ornament. But it is certain that work of this kind is not truly representative of the art in the west of Europe during the twelfth century. Rare though the fine work may be, enough survives to show that sculptors of great talent did not despise this medium of expression. Examples both with figure-subjects and with decorative design may be claimed as English ; a figure of a King in the Dorchester Museum, and the damaged Christ in the Guildhall Museum, found in London, are of the highest merit ; the beautiful pierced fragment in the collection (fig. 72), with a man engaged in bold foliage, was found on the site of St. Albans Abbey, where it may well have been made. The remarkable series of morse ivory chessmen found on the Island of Lewis in the same Table-Case have rich stylized foliate ornament on the backs, while the figures present in a vigorous style Scandinavian physical types of the twelfth century. Animals and monsters, alone or confronted, and clearly derived from oriental motives, recall the ornamentation of the oliphants ; and the draughtsmen (Table-Case, Bay XX, and fig. 71) are carved with figure-subjects, historical, biblical, or mythological, and with figures of animals or monsters.

With the rise of Gothic architecture in the thirteenth century the influence of France became predominant, and through the general imitation of the French style there is a tendency to uniformity in the ivories wherever produced. But the greater artists continued to devote themselves to major sculpture, and ivory carving became in the main an industrial art, though sometimes able to command the services of undoubted masters. In the fourteenth century the workshops, the chief of which appear to have been in Paris, turned out these small sculptures in such quantities that a very large number of them are still in existence. Of the artists themselves we know little ; they are merged in the corporate body of the *ymagiers tailleurs* of whom we read in mediaeval documents, though a few names are mentioned in the inventories. The history and development of ivory carving in the Gothic period is exhaustively treated by M. Raymond Koechlin.

The style of ivory carvings follows that of monumental sculpture, but often at a distance ; and there is a tendency to conservatism which is sometimes misleading ; a frequent cause of this was, no doubt, the reluctance of the older workmen to relinquish the familiar fashions in which they had been trained. In the thirteenth century the spirit of Gothic sculpture is more earnest and exalted ; its types have an ideal and impersonal quality which in the finest work lends them a peculiar nobility. Diminutive figures in ivory may lack the impressive grandeur of the stone statues, but some of them are finely inspired with the spirit of their age ; the group in the Louvre representing the Coronation of the Virgin illustrates this great style of the earlier Gothic period.



PLATE VIII. IVORY STATUETTE OF THE VIRGIN AND CHILD,
FOURTEENTH CENTURY.

But even before the thirteenth century came to an end there appears that tendency to mannerism, which, rapidly increasing during the next fifty years, changed the sentiment of religious art. In the faces, an air of pleased self-consciousness replaces the former grave simplicity; there is too obvious an intention to charm, yet such is the refinement and delicacy of the workmanship that the purpose is constantly achieved. In the draperies, simple folds are broken and multiplied, as if there was a greater preoccupation with costume and personal appearance. Something of this charming decadence is apparent even in undoubtedly fine work such as the



FIG. 73.—Ivory diptych. French. Fourteenth century.

statuette of the Virgin and Child (Pier-Case, Bay XXI, E; plate VIII), and is conspicuous in the average diptychs of the fourteenth century (fig. 73). Nevertheless, the ivory carvers preserved the limits imposed upon them by their material, and maintained general types which avoid too great a preoccupation with nature. But in the second half of the century there was a change in the direction of realism, at first chiefly marked in the rendering of faces; and though for sacred persons the old drapery was retained, the costumes of secondary actors in religious scenes were modified in accordance with contemporary fashions. At the close of the century the influence of the realistic art of Flanders, now predominant even in France, ensured the triumph of realism, and the ideal principles of early mediaeval art were

abandoned. We find heads which illustrate national characteristics, and it becomes easier to distinguish the work of the different countries of Europe.

During the period of the Gothic style the initiative was taken by France, while at its close Flemish influence was especially active; the delicate pierced work, of which a diptych in the Borradaile Bequest (Table-Case, Bay XXI) is an accomplished



FIG 74.—Ivory triptych with arms of Bishop Grandisson of Exeter. English. Fourteenth century.

example, seems to have been practised in the north of France or in Flanders. Other countries were not altogether unproductive, and a certain number of ivories can be assigned to England, Italy, and Germany. We have seen that during an earlier period our countrymen produced work of noble quality, and it is therefore surprising to find so few ivories of the later Middle Ages which can with certainty be ascribed to their skill. Perhaps down to the middle of the fourteenth century the imported French work was so good and so abundant as somewhat to discourage local

manufacture in an age when monastic workshops had given place to those of laymen subject to the competition of the open market. Sometimes the French types may have been so familiar, and so closely imitated, that, in average examples, the copy and the original are not easily to be distinguished. But a few examples are definitely English. Those with the most certain pedigree are a triptych and a diptych, the panels of which are now separated, made for John Grandisson, Bishop of Exeter (d. 1369), whose



FIG. 75.—Carved ivory *Pietà* with original colouring. South Germany. Fifteenth century.

episcopal throne is to be seen in Exeter Cathedral. The origin of these ivories is proved by the presence upon them of shields with the bishop's arms. But apart from this, the work and the types represented are distinct in style from anything Continental, and have an individuality which separates them from the art of any other country. The triptych and one leaf of the diptych are in the collection (Table-Case, Bay XXI, fig. 74); the other leaf of the diptych is in the Louvre at Paris. Another outstanding English ivory is the diptych with Our Lord and the Virgin in the Salting Bequest at South Kensington. The disproportionately small number may in part be due to wholesale destruction during the Reformation.

A certain number of Gothic ivories have been assigned to Germany; these generally follow the style of the French examples. But with the beginning of the fifteenth century South German carvers turned for inspiration to Italy, sometimes with marked success. A small *Pietà*, still retaining most of its colour, is a work full of feeling and dignity which it would be hard to praise too highly (Table-Case, Bay XXI, fig. 75). In Italy, ivory carving does not appear ever to have been generally popular. The most famous early example is the well-known statuette of the Virgin and Child by Giovanni Pisano in the sacristy of the Cathedral at Pisa; the Louvre has carved ivory decorations of two saddles ascribed to Italy and Sicily. Italian ivory croziers of a distinctive character were made before 1350; one, in the Salting Collection at South Kensington, belonged to Benci Aldobrandini, Bishop of Gubbio in 1331, whose arms are upon its cuir bouilli case; others are in the Cathedral Museum at Siena. After the middle of the century, Italy seems to have preferred bone to ivory, and at its close great numbers of altar-pieces, triptychs (Pier-Case, Bay XXI), diptychs, caskets (fig. 76), and mirrors with bone reliefs mounted in marquetry (intarsia) were made in the workshops of the Embriachi at Venice. The caskets and mirrors are usually ornamented with subjects from the French romances, for in the fourteenth century the feudal society of northern Italy was under the influence of French culture. The intarsia work with which they are combined, from the fact that it was frequently executed by Carthusian monks, is commonly described as *alla Certosina*.

The subjects of the ivory carvers are those which were generally in favour throughout the Middle Ages, and may be divided into the two great classes of religious and secular. The former, where they do not consist of isolated figures of sacred persons and saints, are chiefly derived from the Gospel narrative, the Apocryphal Gospels, and the *Golden Legend* of Jacobus de Voragine (James of Varazze, near Savona), Bishop of Genoa (d. 1298), a compilation of early legends amplifying the story of the New Testament, and relating the miraculous lives of the Saints. Subjects from the Old Testament, parallel or typological, so popular in Early Christian Art, and so often employed by the enamellers of the Rhine and Meuse in the twelfth century, were now abandoned; the great majority of these diminutive reliefs were devoted to the Passion of Our Lord and to the glorification of the Virgin. The commonest arrangement for a diptych is the association of the Virgin and Child between angels with the Crucifixion (fig. 73), or of the Nativity with the Crucifixion or Last Judgement.

The secular subjects are derived from the cycles of Romance, or from the chivalry of Europe. The adventures of Launcelot,

Gawain, and Tristan, or of Aristotle, Virgil, and Alexander, are popular themes. A favourite subject for illustration on caskets, where the considerable space available allowed series of scenes to be represented, was the story of the *Châtelaine de Vergy*, a metrical novel of some literary merit. Several caskets so decorated have been preserved: one is shown in the Table-Case, Bay XXI. A favourite scene is the attack on the Castle of Love, seen on the lid of the other casket in the same case. Hunting-

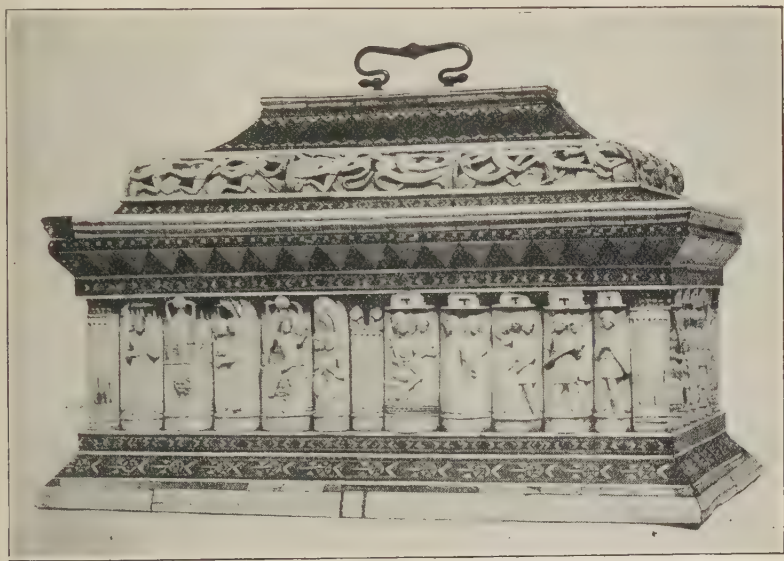


FIG. 76.—Casket with carved bone and intarsia. North Italian. About 1400.

and hawking-scenes, the meetings of lovers, representations of chess and other games played in the halls of the castle after the tables were removed, are the commonest subjects on the combs and mirror-cases which were made in such quantities for ladies' use.

The Mohammedan countries continued to carve ivory during the later Middle Ages, inlaying panels of this substance in their woodwork. These panels are commonly carved with inscriptions in characters of large size, producing a highly decorative effect (Table-Case, Bay XX and fig. 198).

Like much of the monumental sculpture in the mediaeval period, ivory carvings were painted either wholly or in part with

colours and enriched with gilding. Though in the majority of cases this polychromatic decoration has almost entirely disappeared, traces of it may very frequently be detected; in rare instances diptychs and statuettes have come down to us with much of their colour intact. Although we now prefer the mellow tone of old ivory without the addition of colour, the taste of our ancestors was in favour of something brighter; in this they shared the opinion of antiquity. Usually, but not always, the scenes upon diptychs with numerous subjects are to be read, like the mediaeval church windows, from the bottom left-hand corner upwards.



FIG. 77.—Ivory casket with subjects from romance. French. Fourteenth century.

With the Renaissance, the art of the ivory carver, though surviving in most of the countries which had hitherto practised it, ceased to enjoy the same degree of popularity, partly because sculpture in bronze on a small scale (statuettes, plaquettes), or engraving on gems, attracted the attention of the better artists. In northern Italy in the second half of the fifteenth century there was a brief return to the use of ivory, and panels for decorating caskets, with the Triumphs of Petrarch, were made at Mantua and Verona by sculptors influenced by the School of Mantegna. A work of greater merit is a triptych in the Louvre with subjects from the life of Christ executed in the Florentine style of the period, and of such beauty that it may be ascribed to an artist of repute. Other north Italian ivories of the late fifteenth century, possibly produced at Venice, show Flemish or German influence.

In France, combs and mirrors of the first half of the sixteenth century, with rather low reliefs upon hatched grounds, continue the methods of the expiring Gothic period, though introducing new forms and styles of ornament. A few paxes of the same half of the century reveal the influence of Flemish art. Somewhat later, dagger-sheaths or hilts, powder-horns, &c., were decorated with classical and allegorical figures of great merit in the style of the full Renaissance.

In Germany, subjects from engravings and pictures by Dürer,



FIG. 78.—End of the casket, fig. 77. Tristan and Iseult, with King Mark in the tree; the capture of the unicorn.

Hans Sebald Beham, and other artists were occasionally reproduced in ivory, but statuettes and allegorical groups of more original merit may also be ascribed to German art of this period.

The Iberian Peninsula, where Gothic traditions persisted late, was exposed to influences from Italy, France, and Flanders. To the close of the sixteenth century and to the century which followed must be assigned a large and inferior class of statuettes and reliefs in the domain of religious art, especially figures of the Virgin and St. James, crudely gilded or coloured, and thought to have been made in the Spanish and Portuguese colonies. It may also be noted that the negroes in Portuguese territory executed some remarkable ivory carvings at this period: a number of cups,

horns, and other objects from Portuguese West Africa may be seen in the Ethnographical Gallery (Standard-Case SS).

In the seventeenth and eighteenth centuries the fine conventions of mediaeval art were abandoned in favour of naturalism. In religious art a frequent subject was now the crucifix, which, as we have seen, was comparatively rare in earlier periods. In secular art mythological and Bacchanalian scenes, inspired by Rubens and his school, became popular, especially upon tankards mounted in silver. Portrait medallions reproducing the features of contemporary personages sometimes reach a high level, and the less pretentious objects, such as snuff-rasps, bonbonnières, or fan-handles, in which the craftsmen were content to aim at an appropriate decorative effect, are often successful in their degree.

The most conspicuous names in this period are those of the Flemish artists François Duquesnoy, otherwise known as François Flamand or Il Fiammingo (b. 1594, d. 1646), and his contemporary Gérard van Opstal (d. 1668). The former was a sculptor of merit who studied in Rome and was the friend of Nicolas Poussin; he is known to have carved in ivory, but as his works in this material were not signed, they cannot be certainly distinguished from those of other artists; it can only be presumed that some of the finer reliefs, in which the prevailing exuberance is checked by a feeling for the antique, are probably by his hand. Of the art of Gérard van Opstal more is known. Born in Antwerp, and dominated by the influence of Rubens, he went to France and worked for French patrons. Two of a series of bas-reliefs in openwork, with Bacchanalian subjects, now in the Louvre, are signed by him, and are the authoritative examples of his style. Lucas Faydherbe of Malines (1617-94) actually worked in the studio of Rubens, and though, like the two sculptors already mentioned, he did not confine himself to ivory, many of the reliefs with mythological and Bacchanalian subjects in the style of Rubens may be assigned to his hand.

In France the best-known names are those of Michel Anguier of Eu (1614-86); Jean-Baptiste Guillermin (d. 1699); Le Geret, Simon Jaillot (d. 1681), who made crucifixes; David Le Marchand of Dieppe (d. 1726), and Cavalier, who carved medallion portraits (examples in the Frame on pier between Bays XX and XXI). Both the two last-named worked for a time in England, the former signing his portraits D.L.M. In the time of Le Marchand Dieppe was celebrated as the centre of French ivory carving, and had possibly worked in the material for more than a century; John Evelyn in his *Diary* mentions the existence of the craft in the town. With the advance of the eighteenth century there was a great decline, partly caused by the growing popularity of porcelain figures, though there was still no small

output of minor objects and religious figures of slender artistic value.

Germany was prolific during the Baroque period, decorating flagons and other vessels in the Flemish manner, but also, especially at Nuremberg and Augsburg, producing statuettes and reliefs based upon Italian models, sometimes of considerable merit. Of known artists producing reliefs in ivory may be mentioned Christoph Angermayer (d. 1633), whose best work dates from the earlier part of the seventeenth century; his subjects were both religious and secular, and he was capable of greater refinement and restraint than most of his contemporaries.



FIG. 79 —Ivory medallions. On the left, Samuel Pepys the diarist (1622-1703), by Le Marchand; in the middle, Sir Christopher Wren, by Le Marchand; on the right, the Duke of Cumberland (d. 1765).

Balthasar Permoser (1651-1732) reproduced in ivory with great success the bronze statuettes and groups of John of Bologna. Three members of the Zich family, working chiefly in the second half of the seventeenth century at Nuremberg, produced *tours de force* in the Chinese style, such as ivory spheres contained one within the other. During the eighteenth century there were a number of ivory carvers, chiefly in the south of Germany, examples of whose work can be seen in the Bavarian National Museum at Munich.

In Italy the sculptor Alessandro Algardi (d. 1653) is said to have made crucifixes and other figures in ivory in his youth. Giovanni Pozzo carved medallion portraits in the early eighteenth century, and Bonzanigo (d. at Turin 1820) was famous for his foliage in ivory and wood, and for portraits framed with allegorical and emblematic designs of minute execution.

The twentieth century has witnessed a certain revival in the art of carving ivory. Sculptors of talent have turned their attention to it, and the tendency to regard it as of trifling importance has been to some extent arrested.

JET, OBJECTS OF.

The manufacture of objects in jet was confined, as an industry, to England and the province of Galicia in Spain during the Middle Ages, though deposits of jet were to be found elsewhere in Europe—in Portugal, southern France, and Saxony. In England, where the centres of the industry were Whitby and the Isle of Purbeck, ornaments of jet were worn in prehistoric times, such as torcs, bracelets, beads, and trinkets; examples of these are exhibited in the Bronze Age section of the Prehistoric Saloon (*Guide to the Bronze Age*, 2nd ed., p. 95). Pliny, in his description of the stone *gagates*, attributes magical qualities to jet; and, generally speaking, during the first century of our era it was thought to possess medicinal virtue.

In the Middle Ages we find in Spain from the eleventh century literary allusions to the efficacy of jet against the influence of the 'evil eye', which was dreaded by Mohammedans and Christians alike. For protection against its influence jet beads were worn on the necks of children, and the amulet in the form of a hand, of great antiquity, was also used for this purpose. The growth of the industry in Galicia, however, which apparently began in the fourteenth century, coincided and was bound up with the pilgrimages to the tomb of the national patron saint, St. James the Greater (Santiago), at Compostella in that province; at his shrine pilgrims, like those to Canterbury in our own country (p. 23), bought signs or badges to wear on some part of their clothing as a token of their pilgrimage. These signs commonly took the form of scallop-shells (on account of a supposed miracle), and jet images of the saint. The scallop-signs were at first natural shells; later representations, first mentioned in the second half of the twelfth century, were of metal, and, possibly from the fourteenth century, jet. The figures of the saint, probably copied from larger sculpture, altar-pieces or tomb-effigies, seem to have originated in the first half of the fifteenth century, and the collection contains several examples (Desk-Case on North Wall, adjoining the Franks Room); towards this time a company of jet-workers was established. The conventional representation of the apostle, as a rule with the book of the Gospel, the staff, the gourd, the scrip, the scallop, and sometimes one or two kneeling figures at his side, seems to have been fixed by the beginning of the sixteenth century;

but when, in 1590, Philip II prohibited the wearing of a special pilgrim's dress, many of the characteristic features of the saint disappeared.

JEWELLERY.

The surviving jewellery of the Middle Ages is naturally rare for the earlier part of the period. We have to supplement our knowledge from ecclesiastical metal work which, though on a larger scale, constantly employed the processes and the materials of jewellery. (*See Metal Work*).

The jewellery of the barbaric peoples which succeeded the Roman in the west of Europe has been described in the *Guide to the Anglo-Saxon and Foreign Teutonic Antiquities*, 1923. The principles followed by these peoples were those of barbaric Asia and northern Europe. They did not admit the careful imitation of natural forms, animal or human; they avoided modelling in relief, only employing geometrical design and highly conventionalized animal forms; they spread the design over the whole surface and accentuated it by trenchant contrast of colour (gilding and flat garnets set in cells), or of light and deep shadow (cf. p. 177). The introduction of Christianity among the Teutonic tribes modified but did not immediately change these methods; the pectoral cross of St. Cuthbert (d. 687) at Durham is inlaid with flat garnets in the old style. It was not until the Carolingian Age that increased intercourse with Italy and the Christian East substituted new methods and principles for the old; even then there was much survival, and Ireland long remained faithful to ancient tradition. But from the close of the eighth century new features were introduced in the Frankish dominions which lasted to the end of the Romanesque period. The change consisted in the application to a flat gold surface of gems or small plaques of enamel in raised settings, the ground between them being covered with filigree, less commonly with foliate ornament in relief, or with granulations; wire, generally twisted (more rarely pearls threaded on wire), was used for the borders both of settings and of the larger surfaces covered by the ornament.

Among the differences marking off this style from that which preceded it may be noted the following. The objection to relief in different planes ceased; the stones were no longer flat, but cut or polished *en cabochon*, and the settings were sometimes high enough to be fashioned with open arches, so that the gems were seen *à jour*; claws were used to hold them in place. There was a greater variety and more colour in the stones; sapphires, carbuncles, emeralds, and other gems, together with pearls, were now obtained from the East in great numbers. Antique gems, cameo and intaglio, were freely used. Scrolls and plant-motives largely displaced those derived from animal forms, and animals, where

introduced, were naturalistically treated. The human figure, similarly treated, took its place in ornament. The changes of principle were brought about by contact with Italian and Byzantine culture, which in large measure inherited the aesthetic ideas of the Graeco-Roman world.

Very little mediaeval jewellery remains of earlier date than the eleventh century, and it is chiefly English. A small pendant-reliquary of gold set with gems, said to have been taken from the tomb of Charles the Great, was presented to the Empress Josephine at



FIG. 80.—Gold brooch, German, eleventh century, with Byzantine cloisonné enamel.

Aix-la-Chapelle in 1804, descended to the last Emperor, Napoleon III, and was ultimately given by the ex-Empress Eugenie to Reims Cathedral, where it now is. It is of flat, oval shape with loop for suspension, and has in front a large cabochon sapphire surrounded by a broad gold border, with other gems and pearls in raised settings between, which are filigree with pellets and small trefoils in repoussé work.

The 'iron crown' at Monza is a band of iron regarded as a nail of the True Cross, covered by six gold plaques, each with cabochon gems in plain gold settings; surrounded by raised gold 'rosettes' and small plaques of enamel with formal floral designs; the work is of the ninth century. To the same century belong the gold rings

of Ethelwulf (836-58), father of Alfred the Great, and Ethelswith, Queen of Mercia, his sister (855-89) ; they are enriched with niello, and bear Christian emblems, the Lamb, and confronted peacocks. These rings are exhibited in the Iron Age Gallery (Table-Case D) with other Anglo-Saxon rings of similar age (*Catalogue of Finger Rings*, Nos. 179 ff.). The Alfred jewel and the Minster Lovel jewel in the Ashmolean Museum at Oxford, with their cloisonné enamels and remarkable granulated work, belong to the latter part of the century. Not much later is the gold brooch with a cloisonné enamelled bust, found on Dowgate Hill, Cannon Street (Iron Age Gallery, Table-Case D) ; it has a broad gold border with four pearls in raised settings and rich ornament of applied wire and granulations (cf. *Guide to Anglo-Saxon Antiquities*, p. 101). Anglo-Saxon goldsmiths and silversmiths had a reputation beyond their own shores, and among their number was at least one ecclesiastic of high standing, St. Dunstan (d. 988), whose name was remembered in this connexion for centuries.

In the eleventh century Germany was famous for her jewellery, no less than for the larger objects in metal noticed on another page, themselves enriched with all the resources of the jeweller's art (p. 182). Personal ornaments of the earlier eleventh century are represented by the crown of the Emperor Conrad II (1024-39) at Vienna, the crown of the Empress Cunigunde at Munich, and those on the gold figure of the Virgin at Essen and on the reliquary of St. Oswald at Hildesheim ; by a series of personal ornaments for the most part probably made for Gisela, Empress of Conrad II, found at Mayence, and preserved partly in that city, partly in Berlin. The imperial crown has plaques of cloisonné enamel, the remaining space being thickly set with gems and pearls in raised settings ; the other crowns are only less sumptuous with their numerous pearls and precious stones. The jewels consist of circular brooches, two with cloisonné enamelled eagles, others rich with gems, pearls, and enamel amid filigree of gold wire ; boss-shaped ornaments in the same style ; a collar and breast ornament of fine chains with pendent gems ; flat lunate carvings enamelled or set with gems ; and various finger rings. All this work shows a definite Byzantine influence, explained by the close relations of the Saxon Emperors, especially Otto II, with Constantinople ; but the Carolingian tradition is still evident. The enamel in the centre of the Hamilton or Towneley brooch (fig. 80 ; Iron Age Gallery, Table-Case D) has similar Byzantine affinities, and the gold setting recalls that of the gold work of these Rhenish ornaments. The lavish use of gems varying in colour, and of small enamels set as gems, lends great splendour to the jewelled work of this period. At the close of the century, the treatise on divers arts written by Theophilus, otherwise Roger of Helmershausen, at Paderborn (cf. p. 182), suggests that German goldsmiths, like other metal workers, developed their art to

a high degree of excellence. In the course of the twelfth century there was little fundamental change in jewellery; the use of coloured gems and enamelled chatons on a filigree ground continued. The old elements and technical methods spread from the Rhine to the Meuse and northern France, where French and Flemish talent gave them new developments. But though this century is represented by finely jewelled ecclesiastical metal work, it has left very little of its personal jewellery beyond a few finger rings. The same has to be said of the thirteenth century, which also retained filigree and gems, with enamelled chatons, though in less profusion (cf. p. 188). The personal ornaments are rather more numerous, but form an insignificant fraction of what once existed.

The Byzantine jewellery of the period covered by this Guide chiefly belongs to the four centuries following iconoclasm, from the



FIG. 81.—Gold ring with sapphire. Thirteenth century.



FIG. 82.—Gold ring with sapphire. Twelfth century.

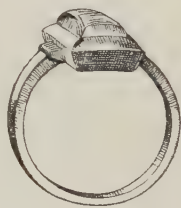


FIG. 83.—Silver ring with amethyst. Found with coins of Henry II (d. 1189).

first half of the ninth century to the time of the Fourth Crusade (1204). Examples can be seen in the Christian Room, Table-Case B. (See also *Guide to Early Christian and Byzantine Antiquities*, 2nd ed., pp. 130 ff.)

From the fourteenth century, especially from its second half, articles of jewellery have survived in greater numbers; our knowledge is further increased by the richer inventories of royal and important persons, in which personal ornaments and their decoration are often carefully described. Those of Edward II, Richard II, and Edward III in England, those of Charles V, Charles VI, and the Duc de Berry in France, and those of the Dukes of Burgundy are especially instructive for these reasons. This was a time of great extravagance in dress, and expenditure on jewellery, regarded as no small part of the owner's capital, was on a corresponding scale. It was the time when French influence, exerted chiefly from Paris, became paramount; this influence had increased from the thirteenth century, reaching its height under Charles V and VI.

After the Hundred Years' War, the predominance passed for a while to Burgundy, whose Dukes, with unimpaired resources, maintained the most splendid court in Europe. The fifteenth century continued the sumptuous tradition of the fourteenth, until the Renaissance introduced new ideas and methods. In both these mediæval centuries the lavish use of gems persisted, but filigree lost favour, and the new forms of enamelling now adopted (translucent on sunk relief, and enamel on the round) gained ground from the cloisonné of the early centuries and the *champlevé* of the later Romanesque; both the new processes, being executed on silver and gold, were peculiarly suited for association with gems



FIG. 84.—Pendant-reliquary, gold with translucent enamel.
French. Fourteenth century.

and pearls, and for all the more delicate achievements of the goldsmith's art. The jewellery of the high Middle Ages, though made wholly in lay workshops, was still influenced by religious ideas. Inscriptions in the form of texts or invocations were commonly introduced on brooches, rings, and other objects; the figures of sacred persons or saints were represented. The belief in the prophylactic power of names, texts, and particular kinds of stones underlay these usages; a jewel was more than a mere ornament; it was an amulet and a source of protection to the wearer.

The Renaissance introduced fundamental changes. The jeweller was now a different person from the maker of church metal work. The spirit of the time was secular; religious subjects, though not excluded, were for the most part replaced by mythological or allegorical figures and amorini. Translucent enamel was used not

for *basse taille* but for designs in *champlevé* on gold, often the scrolls or strap-work originally suggested by the Venetian imitations of oriental models. Enamel on the round came into renewed favour; the nude figures of classical mythology were often enamelled in white. Gems were no longer *en cabochon*, but cut or faceted. Diamonds were more freely used, not merely as before in the form of the natural crystal which takes the shape of two pyramids base to base, but table-cut, and set with foils to heighten their brilliance. Cameo and intaglio gems, both antique and cut by contemporary engravers (p. 105), were worn in rings and other ornaments.

Italy, the home of the Renaissance, the country where every goldsmith was a sculptor, naturally produced early and fine examples of the new jewellery, the methods of which, in their maturity, are described by Cellini in his treatise on the goldsmith's craft. The new manner spread into France and southern Germany, where, at Augsburg and Munich, pendants and other jewels were made in numbers. In England, where the mediaeval tradition lasted late in all the crafts, not ending until the Reformation, the new jewellery was not produced much before the middle of the sixteenth century. The age of Elizabeth was a time of wealth and security; it witnessed an outburst of luxury in personal adornment. New types were added to the old: miniatures were worn in jewelled mounts, jewelled watches and gold and enamelled books of devotion hung from ladies' girdles (fig. 87). Elizabethan jewels are the most national of English gold work. They have originality and often high technical skill, but the design is frequently over-elaborate; there is exuberance, and a certain lack of proportion and restraint. Although jewels of the Renaissance were frequently destroyed in subsequent periods in order that the gems might be reset or the materials utilized in new forms, they have come down to us in greater numbers than those of the Middle Ages, and are therefore more familiar. Further, the large portraits of the time begin to represent jewels with an exactitude and on a scale which enables them to be studied far better than in the small miniatures of mediaeval manuscripts; while engraved designs for fine jewels were produced not merely by the so-called *maitres ornementistes* (Virgil Solis, Ducerceau, Erasmus Hornick, and, at the end of the sixteenth century, Theodor de Bry), but by the well-known artists: the designs of Hans Holbein are justly celebrated as masterpieces of their kind.

The seventeenth century was marked by the rise in importance of the gem as compared with the metal in which it was set, and especially by the increased use of diamonds. Rose cutting was invented in Holland about 1640, brilliant cutting by a Venetian at the close of the century. The enamelled scrolls and strap-work continued in the earlier years, reproducing patterns by Mignot,

Le Blon, and others. White enamel was favoured for covering flat surfaces; to this designs were in time applied in enamelled colours; the tulip was especially popular, spreading in the second quarter of the century from Holland into other countries. As the century advanced, the metal holding the gems was reduced to a minimum; the stones were placed close together, eclipsing their settings. The fashion of making ornaments in filigree was popular in the Low Countries, whence it passed to England in the reign of Charles I. The seventeenth century was the age of the

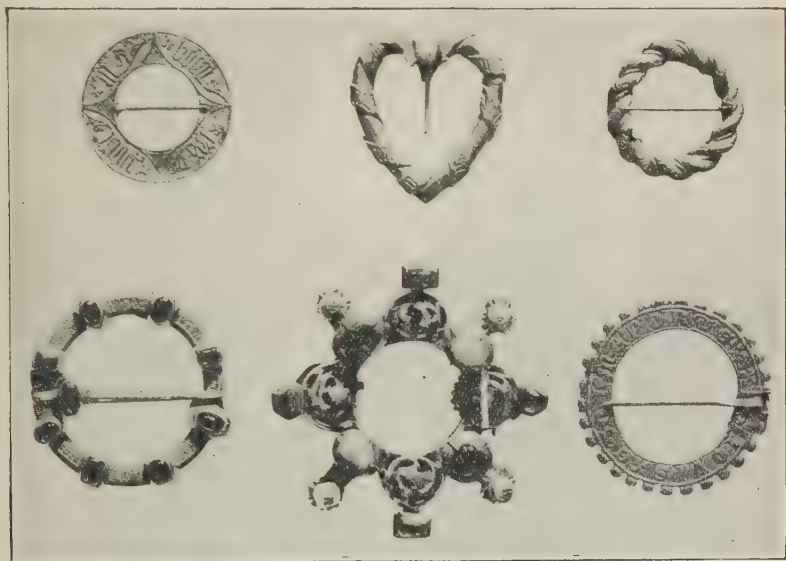


FIG. 85.—Medieval gold brooches (Franks Bequest).

Baroque style, which to some extent affected jewellery as it did metal work on a larger scale (p. 194). Originating in Italy, it was highly developed in France in the reign of Louis XIV, and from there passed to other countries; it made itself felt in the art of England with the Restoration, when French influence was powerful at the Court of Charles II (cf. p. 194).

The eighteenth century witnessed the rise of the rococo manner, which came as a reaction against the tendencies ruling in the later years of Louis XIV. It was a lighter and more fanciful style (p. 195), prolific in delicate and graceful forms; it corresponded in time to the reign of Louis XV. During this period French designs were again taken as models in England; the effacement of the metal

settings by the gems which they supported was even more complete than before. Early in the century, cheap imitations of brilliants were made in marcasite (iron pyrites); towards the middle, cut steel was introduced in England. Gold was given different colours by alloy with other metals, to produce effects of contrast.

Jewellery soon felt the effect of the classical revival which set in towards 1770. This was succeeded by the period of industrialization which now began in England, and for a short time affected the style of a France disorganized by revolution and preoccupied by foreign wars. The influence which subordinates the craftsman to the machine still resists the efforts of the artist who strives to set the needs of fine craftsmanship before those of wholesale production.

The above short outline of the development of jewellery, which



FIG. 86.—Strap or belt ornaments, from the Castle of Chalcis. Venetian. Late fourteenth century.

owes much to the works of recent English writers on the subject, may conveniently be supplemented by notes on a few of the more usual types of ornament.

Belts or Girdles. The jewelled belt was worn by both sexes in mediæval times. The buckle, and the tag or pendant at the other end, which hung down before the body, were often of precious metal, enriched with gems or enamel, while the belt itself, whether of leather or stuff, was garnished with studs or bars of gold and silver set with gems, or with enamelled medallions. Such girdles have rarely survived, but are commonly represented on sepulchral monuments and in paintings; while the inventories constantly make mention of them. From the side of the girdle hung the *gyn cière* or pouch, itself often richly mounted and set with pearls and precious stones. *Gyn cières* for common use were of latten, with a religious inscription in niello, very often: *Ave Maria, graciae plena*; *Dominus tecum*. In the time of the Renaissance ornamental girdles were especially worn by women, and were

composed entirely of metal; they were frequently flat silver or silver gilt chains, having at intervals cast or chased plaques, which, like the clasps, were enriched with gems or enamels. From the side hung such objects as keys, purse, scissors, and knives in cases. More rarely, watches hung from the girdle, as in a portrait of Queen Elizabeth in the National Portrait Gallery, or richly jewelled little books of devotion, with gold covers, some-

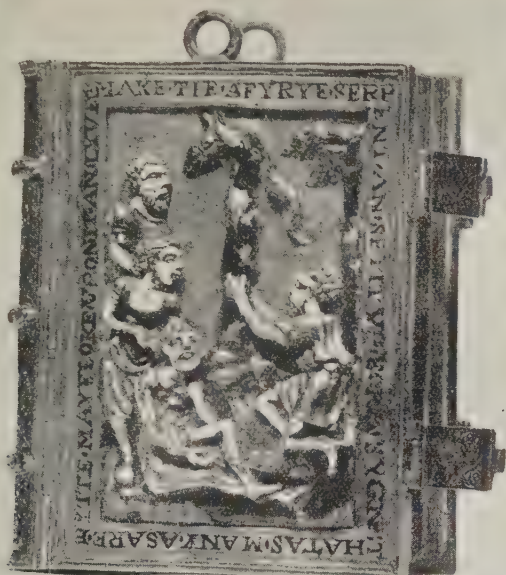


FIG. 87.—Enamelled gold 'girdle-book', said to have belonged to Queen Elizabeth.

times enamelled (Desk-Case in Franks Room). A pomander (from the French *pomme d'ambre*) or 'musk ball' was also suspended from the girdle, as it had been in later mediaeval times. This was a ball perfumed with various scented substances (musk, civet, ambergris) contained in an open framework, sometimes of gold set with jewels (Desk-Case in Franks Room and fig. 207). Thus Henry V possessed various 'musk balls' mounted in gold or silver gilt; Henry VIII had 'goodly gold pomaunders with chains', Mary Tudor had even 'a pomander of golde w^t a diall in y^t', and Catherine Howard one 'wherein is a clocke'. The pomander was common from the

fifteenth century to the eighteenth ; it will be remembered that in the *Winter's Tale* Autolycus carried examples in his pack. In the eighteenth century jewelled and enamelled châtelaines and étuis were worn suspended from the girdle.

Bracelets, though worn in late Roman and early Byzantine times, are not in evidence among the ornaments of the later Middle Ages ; the long sleeves of ladies' dresses were unfavourable to their use. At the Renaissance they were again worn, and fine examples of gold enriched with cameos and with enamel are in existence.

Brooches (*fermail, ouche, nouche*). The usual mediaeval type was a ring-brooch made of bronze, silver, or gold, according to the means of the wearer, and often bearing a love motto, religious invocation, or words regarded as having magical and protective power ; the costly brooch was set with gems in high settings. A variety in form was sometimes obtained by changing the plain ring to a lozenge or a heart (Desk-Case, and fig. 85). Modification of costume towards the end of the fifteenth century drove the brooch out of fashion as an object of practical use ; during the Renaissance it survived as a mere ornament on the front of the dress or even on the borders of the sleeves ; it was especially fashionable as a decoration for the hat (see *Enseigne*).



FIG. 88.—Silver ornament from the Castle of Chalcis, Venetian. Late fourteenth century.

Buttons of the precious metals were worn in great numbers by the wealthy from the second half of the fourteenth century, when tight-fitting clothes had replaced the loose garments of earlier times. In the sixteenth century they were often enamelled : an item in the inventory of Mary Queen of Scots mentions four hundred and four enamelled buttons, each with a ruby in the centre.

Collars and Necklaces. Collars, as developments of heraldic badges, were worn in the second half of the fourteenth century, an important type being the enigmatic collar of SS. The broom-pods of the Plantagenets are seen in the collar of Richard II in the well-known diptych at Wilton House ; later kings, like Edward IV, embodied their badges in their collars. The collars of the orders of knighthood followed this principle ; in the fourteenth year of Henry VIII it was ordered that the collar of the Garter should be formed of medallions of red and white enamelled roses encircled by the Garter ; so it appears in the portraits of the sixteenth century and later. The necklace, though popular among the Greeks and Romans, was not a common mediaeval ornament among women much before the fifteenth century, when the inventories mention examples with enamel and precious stones.

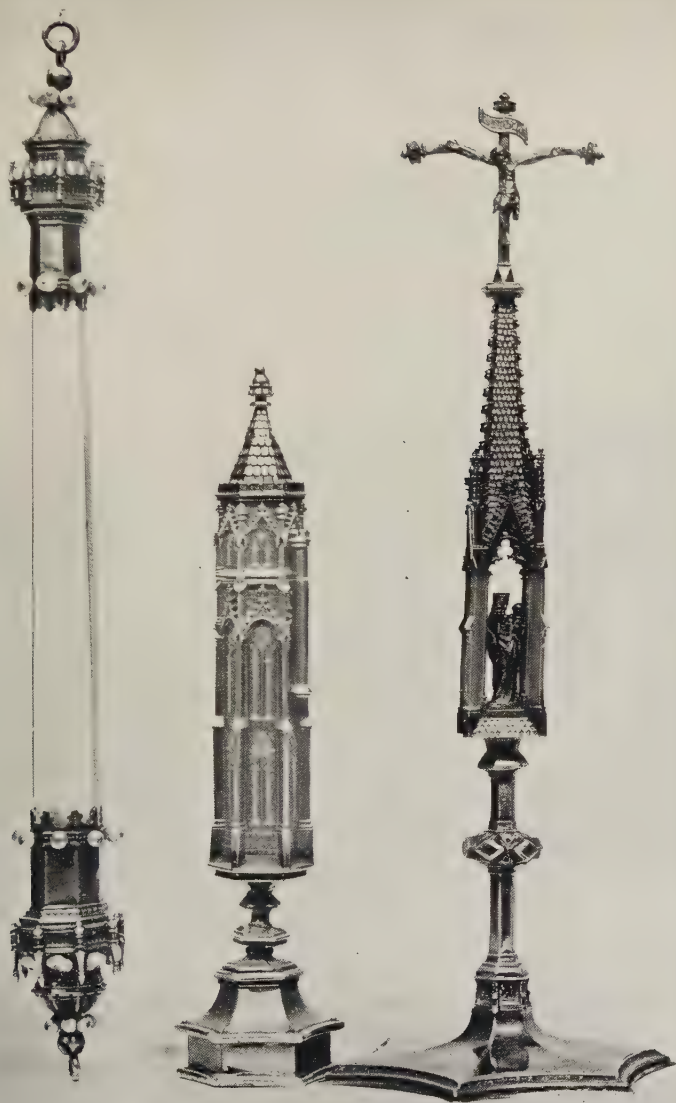


PLATE IX. ROCK-CRYSTAL BATON, SILVER GILT TURRET, AND SILVER
PARCEL GILT TABERNACLE (BORRADAILE BEQUEST).

and artists, especially in Italy, depict them in portraits. From the fifteenth to the seventeenth century men as well as women wore linked neck-chains, often very massive, and generally of plain gold; kings possessed collars set with pearls and precious stones. Ladies' neck-chains in the sixteenth century consisted of ropes of pearls and strings of gems, or of sections of enamelled and jewelled gold, falling low and often festooned over the breast. Necklaces in the stricter sense, encircling the throat, were also jewelled and enamelled. The fashion of wearing these costly ornaments ended about the middle of the seventeenth century. Though the necklace was afterwards revived it was not habitually worn in so conspicuous a form.

Ear-rings. These ornaments, worn by the Greeks and Romans, by the various Teutonic tribes, including the Anglo-Saxons, and in the Byzantine Empire, fell into disuse in the later Middle

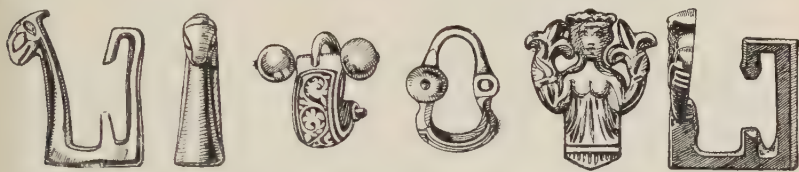


FIG. 89.—Belt-hooks and ear-rings from the Castle of Chalcis. Venetian. Late fourteenth century.

Ages, though examples of the early eleventh century at Mayence and Berlin have been associated with the name of the Empress Gisela, consort of Conrad II, and ear-rings are supposed to have been worn in the twelfth century. After this period the style of dressing ladies' hair was for a long time unfavourable to their use. Ear-rings reappear at the close of the fourteenth century (fig. 89), but the ornament was not generally popular till much later. About the middle of the sixteenth century ear-rings reappear, probably through Spanish influence, and usually in the form of pear-shaped drops. In the latter part of this century and the first part of the next the fashion was affected not only by women but by men; in England men adorned themselves with ear-rings down to the time of the Commonwealth; Charles I wore one upon the scaffold. In later times they became once more a feminine ornament, and in the eighteenth century were often composed of brilliants and pearls.

The *enseigne* was an ornament with brooch attachment worn in the hat. Many of the lead pilgrims' signs and noblemen's badges (p. 23) were so worn, and the custom suggested the more costly hat ornaments in such vogue during the fifteenth and sixteenth

centuries, only going out of fashion towards the middle of the seventeenth ; the earlier of these gold and gemmed ornaments, like the lead signs already noticed, represented family badges or figures of saints. The charming little ' Pelican in her piety ' set with a ruby and a crystal of diamond (Franks Room, Desk-Case) is a rare surviving example of the fifteenth century. During the Renaissance the enseigne was very popular ; it is frequently mentioned in inventories or depicted in portraits of the period. Most commonly it had the form of a medallion, and was made of gold enriched with gems and cameos, or embossed and enamelled figures, often presenting emblems or devices ; the Waddesdon Bequest contains



FIG. 90.—Enseigne or hat-jewel, enamelled and jewelled. Italian. Sixteenth century. (Waddesdon Bequest.)

a fine example with the Judgement of Paris (No. 152). Cast medallions of bronze or copper, with figure-subjects, sometimes enamelled, were worn by those unable to afford the costlier examples. But great sums were paid by kings and princes for ensembles of fine workmanship. One of the most interesting allusions to such objects occurs in a letter of James I to Prince Charles while in Spain with the Duke of Buckingham in 1623. Here we read of five or six fair jewels to be worn in men's hats, not to be of less value than six or seven thousand pounds apiece.

Pendants. In the Middle Ages pendants had the most various forms, and were commonly religious or amuletic in character, crosses, small reliquaries, and even little diptychs or triptychs (*tableaux* or *tabulets*) in enamel occurring among them ; the Salting reliquary (Franks Room, North Table-Case) for a thorn from the True Cross, with its translucent enamels on gold and its amethyst back, is a rare example of the fourteenth century. The pendant was a favourite jewel of the Renaissance, and is well represented by surviving jewels. Pendants enriched only with gems are characteristic of the first half of the sixteenth century ; to the latter half belong those with enamelled figure-subjects in relief or with baroque pearls (the collection contains fine examples, some in the Waddesdon Bequest (Nos. 147 ff.)). The subjects are now more frequently classical or emblematic than religious, and south Germany (Munich and Augsburg) was a great centre of production. Cameos frequently formed the central figure of Renaissance

pendants (Franks Room), as did richly mounted medals; the so-called Phœnix jewel in the collection, once belonging to Sir Hans Sloane (Desk-Case), is a noble example of the latter class, bearing a bust of Elizabeth resembling her silver medal, with a phoenix on the reverse. Miniatures were similarly framed; the Lyte jewel in the Waddesdon Bequest (No. 167), with its miniature portrait of James I and beautiful enamelled back, is a fine example of the early seventeenth century. The wearing of pendants with jewelled and enamelled frames containing miniatures or cameos continued through this century, painted enamel with flowers or other designs often decorating the back.

Rings, which have been worn from the time of the Early Egyptian dynasties onwards, are the articles of mediæval jewellery which are found in the greatest numbers. The most important use of finger-rings was to serve as signets, a device being either engraved upon the metal itself or upon a stone set in the



FIG. 91.—Gold signet-ring of Mary Queen of Scots, with arms cut in crystal and cipher at back.

bezel. From the Carolingian period to the fourteenth century the art of engraving hard stones was little practised (*see* p. 104). Antique gems were therefore frequently employed, and these were all the more popular if their subjects bore a superficial resemblance to those most in demand by Christians, the head of Jupiter Serapis representing that of Our Lord, and Jupiter with his eagle serving as the Evangelist St. John. The signet-ring has been in continuous use since its first adoption, for after the fall of the Roman Empire the Teutonic tribes soon learned its advantages. In England from the twelfth to the fourteenth century finger-rings commonly had plain hoops and contained a single uncut stone (figs. 81, 82). Attention may be particularly drawn to the rings found with coins of Henry II (North Table-case in the Franks Room, and fig. 83). Both in the fourteenth and fifteenth centuries rings were frequently engraved with designs and inscriptions, the engraving of legends and figures (especially those of saints) being a constant feature, and enamel was used. With the Renaissance, chased and enamelled figures in relief upon the shoulders came into fashion. Coats of arms were now frequently engraved on signet-rings in England,

as they had been some two centuries earlier in Italy. Various new types came into fashion, such as the *fede-ring* and the *decade-ring*, most of which are described below. Mourning-rings were most in favour in the seventeenth and eighteenth centuries, posy rings in the same period; the fashion of wearing both was characteristically English. It should be noted that rings were not confined as now to the four fingers or to the lower joints. They were commonly worn upon the thumb and upper joints, and may often be seen in these positions in well-known pictures, such as Raphael's portrait of Julius II: these fashions explain the occurrence of rings exceptionally large and exceptionally small in size. It may be recalled that under the Roman Empire the fingers of fops were covered with rings almost to the tips, and that Shakespeare alludes to an alderman's thumb-ring, through which Falstaff in his youth might have crawled.

Bow-rings of horn or stone (crystal, chalcedony, onyx, &c.) are



FIG. 92.—Bow-ring. Venetian.
Fourteenth century.

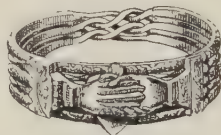


FIG. 93.—Fede puzzle-ring.

used in the East for releasing the bow-string, and worn upon the thumb of the right hand, the narrow part of the hoop being turned inwards. They would appear to have been known to Europeans connected with the East, as the collection contains a fine nielloed gold ring of this type made in Venice at the close of the fourteenth century (fig. 92). Oriental examples may be seen in the Asiatic Saloon (Wall-Case 48).

Cramp-rings. It is recorded that the ring of Edward the Confessor, removed from his coffin in 1163, was kept for a long time at Westminster, and applied for the cure of cramp or for the falling sickness. At some date not precisely known, and perhaps in connexion with this practice, the Kings of England began to bless rings as preservatives against the above-mentioned maladies. The ceremony, which is first mentioned in the reign of Edward II, took place on Good Friday, when the money of the royal offering was converted into rings. These the king rubbed between his hands while prayers were repeated, the idea being that the virtue in the king's touch was derived from the sacred oil with which they had been anointed at his coronation. The blessing of the rings is supposed to have been discontinued by Henry VIII and

revived by Queen Mary, but gifts of them by Edward VI are recorded (Add. MSS. 35184). These royal cramp-rings were held in great repute, and were often sent abroad as presents. They were perhaps plain hoops of silver or gold; but no certainly authentic example has survived. Other rings, which had never been hallowed by the kings, were also worn against the cramp, and were inscribed with magical formulae of the kind described on p. 151.

Decade-rings, so called from the ten projections upon the circumference, were used to serve the purpose of rosaries, each projection representing an *Ave*, and the head or bezel, which was sometimes engraved with IHS. and the three nails, the *Pater Noster* (fig. 206). The earliest examples of rings claimed as decades go back to the fourteenth and fifteenth centuries. It should be noted that some rings so described have more than ten knobs or protuberances.

Episcopal or Pontifical rings, which have formed part of a bishop's



FIG. 94.—'The Percy Signet.' Late fifteenth century.

insignia from the seventh century, were worn by the bishop, when vested, upon the last finger but one of the right hand (the annular finger): as they were drawn over a glove, these rings were rather larger than those now in use. Bishops were in the habit of wearing several rings, which were never below the second joint of the finger; they also wore rings upon their thumbs. On the figure of Archbishop Chicheley in Canterbury Cathedral a thumb-ring and episcopal ring may be seen, but neither is upon the lowest joint. Pontifical rings were very rarely, if ever, engraved as signets, the bishops' seals being cut upon separate matrices which, like the seals of abbots, were usually broken in pieces upon their decease. The rings which bishops were in the habit of bequeathing to kings, according to a common mediæval custom, appear to have been not their pontifical but their personal rings; their episcopal rings were often buried with them, as in the case of several bishops of Durham beginning with Ralph Flambard (1099–1128). The favourite stone for the pontifical ring was the sapphire; but the emerald and ruby also occur, and some-

times rubies are added to the sapphire, as in the ring which William of Wykeham bequeathed to his successor in the diocese of Winchester. According to the ancient lore which ascribed mysterious properties to the various precious stones, the sapphire was said to have the power of subduing desire, growing dim when worn by the unworthy: it was also the colour of the Virgin, and thought to be in peculiar sympathy with the heavens. The rings of the early bishops were of various materials and were sometimes engraved with designs; but in 1194 Pope Innocent III decreed that they must be of gold, and that the stones with which they were set must not be engraved. Figure 81 represents a ring of Episcopal type.

Fede-rings (fig. 93) are rings the bezel of which is formed by two clasped hands, signifying plighted troth. The form goes back



FIG. 95.—Iconographic ring.
Fifteenth century.

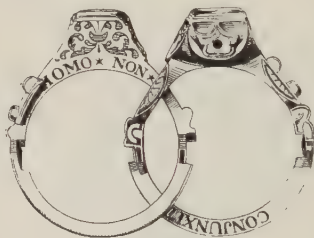


FIG. 96.—Gimmel
ring.

to Roman times, and was common during the Middle Ages and later. Some fede-rings were also *gimmel*, or puzzle-rings. The rings used at weddings by the fisher community of the Claddagh at Galway, the bezels of which represent two hands holding a heart, are derivatives of the fede type.

Gimmel rings (fig. 96). The name of these rings is derived from the French *jumelle* = twin, and they are so called because made of two flat hoops fitted so closely to each other as to have the appearance of an undivided ring. Each half might be engraved with a name or a motto, and worn by a different person; the ring might thus serve as evidence to establish identity or good faith, as in Dryden's play of *Don Sebastian*.

Iconographic rings. This name, of Greek derivation, has been given to a class of rings, most numerous in the fifteenth century, engraved with figures of divine persons and saints. The figures are engraved upon the metal bezels, very commonly in pairs, and were originally in many cases nielloed or enamelled. Two very favourite saints are St. Barbara and St. Christopher, the former of whom was held to protect men from sudden death, the latter from

various perils of sickness, tempest, flood, and earthquake. Fig. 95 is an example of the class.

Jewish betrothal rings (fig. 209), of which examples may be seen in the Waddesdon Bequest Room (Nos. 195-6), were not intended to be worn, but after being placed on the fingers of the contracting parties during the ceremony, were kept by them as mementoes. The bezels of these rings are usually in the form of a building, which represents either the Temple at Jerusalem or the Ark of the Covenant: inside the hoop are engraved in full or in an abbreviated form Hebrew characters signifying Good Luck, or Joy be with you. Those in the Museum are German or Flemish work of the sixteenth and seventeenth centuries.

Magical rings. Rings were constantly worn as a protection

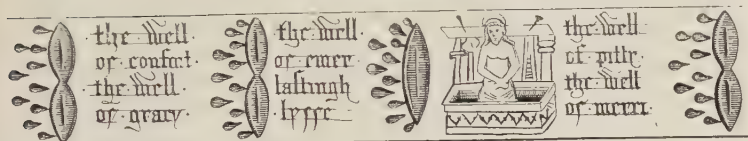


FIG. 97.—The Coventry ring, with the Five Wounds. Fifteenth century.

against disease, misfortune, or malefice, sometimes because the stones or other substances with which they were set, in accordance with the almost universal belief in ancient times, were possessed of mysterious properties (the very word amethyst, for instance, implying protection against drunkenness), more frequently because they were engraved with magical inscriptions which gave them the value of talismans. Several rings and brooches in the collection have magical legends, and the word ANANIZAPTA is engraved with the names of the three kings of Cologne in the interior of the Coventry gold ring (fig. 97), on which are represented the five wounds of Our Lord, themselves regarded as prophylactic against evil.

Under magical rings may be included those set with 'toad-stones' (fig. 99). These are really the palatal teeth of the extinct ganoid fish *lepidotus*, but were popularly believed to be stones taken out of toads' heads. Some existing examples are ascribed to

the fifteenth century, and in the inventory of the Duc de Berry (d. 1416) there is mention of a 'crapaudine' set in a golden ring. They were supposed to protect new-born children from the power of fairies; and water in which they had been immersed was considered a specific against diseases of the kidneys. The superstition as to the power of toadstones persisted down to modern times: Joanna Baillie, in a letter to Sir Walter Scott, refers to a ring in possession of her mother which was frequently borrowed on the occasion of births in neighbours' families. (*See also Magic.*)

Motto and *Posy* rings, popular among the Romans, were much used in the Middle Ages (figs. 100, 210). The word *posy* is derived from the French *poésie*, poetry. The gift of a 'posy' was often



jasper melcer haltsar

FIG. 98.—Gilt bronze signet-ring with Merchants' mark and names of the Three Kings. English. Fifteenth century.

FIG. 99.—Silver toadstone ring. Sixteenth century.

accompanied by a flower or bouquet, to which the term has now been transferred; a *posy* ring is therefore one engraved with a motto or verse, whether of an ethical, religious, or amatory character. Many rings of the fourteenth and fifteenth centuries have mottoes of the former description, such as *in Deo salus*; *tout pour bien fayre* (*faire*), &c.; these are often engraved inside the hoops of the iconographic rings (p. 150). Although the custom of engraving mottoes on rings was general in mediaeval times, and many such mottoes may have had allusion to betrothals, it was in the period between the sixteenth and eighteenth centuries that the regular *posy* rings so numerous in large collections were made. These are usually plain hoops with the motto engraved in the interior, used by all classes as betrothal rings. The same mottoes are found constantly repeated, and little originality of poetical skill is manifested in their composition. The following are a few of the favourite verses: *In thee my choice I do rejoice*; *God above increase*

our Love : O Lord us bless in happiness ; As God decreed so we agreed, &c., &c. A large number of these rings are in existence.

Papal rings (fig. 187). These huge rings of gilt bronze set with glass paste, and usually bearing in relief upon the shoulders the arms of a pope, date from the fifteenth century and later. The purpose for which they were made is not quite clear, but they are supposed to be emblems of investiture with papal fiefs, or credentials authenticating some important mission. Some of them have the arms of a king as well as those of a pope ; a few rings of similar character are definitely regal and not papal.

Poison rings. The device of carrying poison in a cavity either of the hoop or stone of a ring was known to the Greeks and Romans : several stories from ancient history record the use of

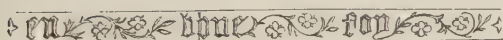


FIG. 100.—Posy ring. Fifteenth century.



FIG. 101.—Ring of Sir W. Bovill, Sergeant - at - law, 1864. Inscribed : *Leges Sine Moribus Vanae*.

such rings by desperate persons ; thus Pliny relates that the guardian of the Capitol, arrested for permitting a sacrilege, broke the gem of his ring in his mouth and immediately expired, the stone having been cut so thin as to be easily broken by a bite. In more modern times the philosopher Condorcet, when imprisoned by the Convention, committed suicide in his cell by means of poison which he had concealed in his ring in readiness for such an emergency. Though it is known that rings were actually used to contain poison, and though such objects were quite in accord with the spirit prevailing at the time of the Borgias, it is not safe to describe all the examples in which cavities are found as poison rings. Cavities closed with covers were used to contain perfumes, diminutive sundials, and other things of a harmless character.

Sergeants' rings were presented to all brother sergeants, important personages, and to friends by sergeants-at-law on their elevation to their new degree. The custom is mentioned as one long established in 1429, the office of sergeant having existed from

the middle of the thirteenth century. The expense of having the rings made was very considerable ; thus in 1736 fourteen sergeants gave away 1,409 rings, costing them each about £55. The rings were usually plain hoops without bezels, engraved with mottoes relating to the law. An early example of the fifteenth century in the collection has *Vivat rex et lex* ; that shown in fig. 101, which may be regarded as a typical example of comparatively modern date, has *Leges sine moribus vanae*.

KEYS. See p. 158.

KNIVES.

At a time when even spoons were rare and forks (p. 97) unknown knives were indispensable. The makers of knives and their handles formed two distinct corporations in the Paris of the thirteenth century, for the handles were often elaborately carved or decorated with designs, mottoes, and coats of arms, some being of ivory with silver mounts, others of silver with rich ornament or translucent enamel. The latter style is characteristic of the late fourteenth and early fifteenth centuries, and is well illustrated by the fine set of knives in a *cuir bouilli* case, made for John the Intrepid, Duke of Burgundy (Table-Case, Bay XV, and fig. 102). Towards the end of the Middle Ages handles with sculptured figures begin to appear : wooden German knife-sheaths carved with religious subjects, of the sixteenth century (Window-Case, Bay XV) may be noted. The blades seem to have been made rather thin, for even the large and broad examples are often very narrow at the backs : the upper parts were sometimes engraved or damascened. Carver's knives were constantly used in sets, and kept in leather sheaths or cases as in the example already mentioned. The larger sort, of two kinds, were for cutting meat and bread for the company ; the smaller knives, which also performed the functions of a fork, for the use of individuals at the table. At the table of a prince or great noble the esquire carver carried his lord's personal knives in the sheath with the carving-knives, placing them by his side when the meal began, and being himself responsible for their custody. Knives with very broad blades, called in French *présentoirs*, were used for helping the guests by conveying the slices or portions from the dish to their trenchers.

Working knives were carried by women, suspended from their girdles by thongs, cords, or chains ; by men they were carried in the pocket or at the belt, secured in a *gypcière* (p. 42). Inventories mention horn, latten, and wood for the handles of plain knives ; for costlier specimens, cedar, ebony, and painted wood ; it may be mentioned that the plain knives used by poorer persons

underwent no essential change throughout the period. In France, the cities of Paris, Beauvais, Langres, and Périgueux were famous for their knives in mediaeval times; in England the reputation of Sheffield was already established in the fourteenth century. *Hunting-knives* were carried in cases suspended from the right side of the girdle: there were generally two of different sizes accompanied by smaller instruments.

Allusions occur in English plays of the sixteenth century to *wedding-knives*, which formed part of the paraphernalia of a bride, and hung from her girdle: a fine pair from Scrivelsby, Lincs.,

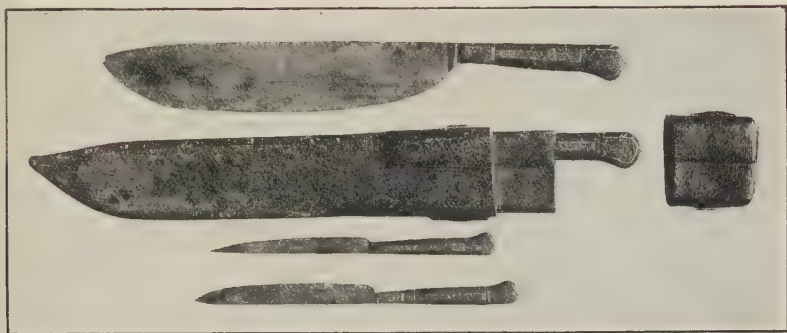


FIG. 102.—Set of knives made for John the Intrepid, Duke of Burgundy (d. 1419).

with inscriptions and date 1610, in an embroidered case, is exhibited in Table-Case, Bay XV.

LATTEN. See p. 240.

LEATHER JUGS AND BOTTLES.

The use of leather for such vessels is of great antiquity and this unbreakable material rivalled earthenware in the Middle Ages, especially in England, where the use of leather jugs and bottles was more general than on the Continent: instances are even recorded of their exportation to France. At the end of the fifteenth century metal vessels, mainly of tin and pewter, increased in number, and the last years of the sixteenth century saw the introduction of finer pottery and glass vessels, which, by the end of the seventeenth, had in general superseded the leather jugs and bottles. To the sixteenth and seventeenth centuries belong the barrel-shaped costrels and the leather jugs

which are to be seen in many museums and old houses in England. The most familiar form of jug is the 'black jack', so called either because it was made of jacked leather, or because it more or less resembled a jack, or leathern coat. The larger sizes of the black jack were known as *bombards*, because their great circumference and large mouths recalled the cannon of that name. A good example (fig. 103), *temp.* Charles I, dated 1646, is exhibited in Pier-Case, Bay XVI, B. In particular places where old traditions were deliberately kept up, leather vessels were in use until modern times. Thus Charles Lamb, in his essay on Christ's Hospital, records the employment of black jacks in that school, together with wooden piggins (cf. p. 250), down to about 1800.



FIG. 103.—Leather bombard.

LETTERING.

The alphabets used upon mediaeval monuments large and small follow the changes of the written alphabets, but often at a considerable distance of time. Letters are usually divided into two main classes: (1) *Majuscule*, or large, subdivided into capitals and uncials; (2) *Minuscule*, or small, derived from the majuscules as being of a more convenient size. Mediaeval archaeology has chiefly to deal with capitals, uncials, and the Gothic minuscule alphabet familiarly known as black-letter: with the cursive, or running hand, we are not here concerned. *Capitals* may be roughly de-

defined as *angular* large letters, the strokes forming angles except where curves are unavoidable. *Uncials* are *rounded* large letters, in which angles are as far as possible replaced by curves.

At the beginning of the Middle Ages, Roman capitals, the prototypes of our capitals of the present day, were still used; but to a certain extent they were barbarized, while Greek letters continued to be used for abbreviations of the names Jesus Christ, IHC XPC standing for the first two and the last letters of the Greek word for Jesus, and the first two and last letters of the Greek word for Christ. The letters IHC ultimately became the familiar IHS of our churches. The rounded uncial letters

began to appear on monuments during the Carolingian (later Frankish) period, which commenced about A. D. 800, and they gradually increased in number throughout Romanesque times: fig. 104 illustrates various forms of letters used in the eleventh, twelfth, and thirteenth centuries. The complete uncial alphabet, or Gothic majuscule (fig. 105), was not in general use until the last quarter of the thirteenth century, and lasted until the middle of the century following: it is commonly known as *Lombardic*, though this term should strictly be confined to an Italian alphabet perfected in the eleventh century in the Lombardic duchies in the south of the Peninsula. The Gothic minuscule, or black-letter,

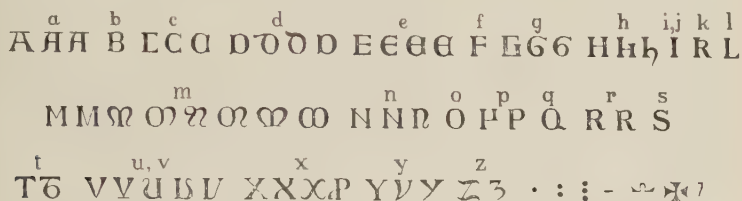


FIG. 104.—Alphabets. Eleventh to thirteenth century, after Demay.

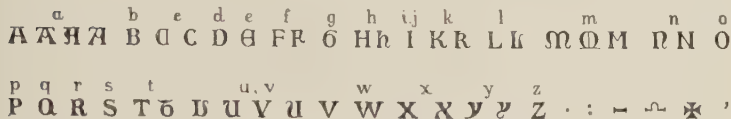


FIG. 105.—Lombardic alphabets, after Demay.

superseded the Lombardic in northern Europe about the middle of the fourteenth century. It is essentially the alphabet still used in most German printed books, but was never adopted in Italy, where the Lombardic continued until the middle of the fifteenth century. Soon after that time the influence of the Renaissance brought about a general return to the old Roman letters. North of the Alps this change was effected less rapidly, and from the close of the fifteenth century for about thirty years a transitional alphabet was employed, in which Roman capitals were mingled with Gothic majuscule and minuscule forms: by the middle of the sixteenth century the purer Roman capitals had been generally adopted, except in Germany. The numerals used for dates before the introduction of the Arabic figures, being seven letters of the Roman alphabet (I, V, X, L, C, D, M), naturally followed the developments indicated above,

from Roman through Lombardic and black-letter back to Roman again.

Mediaeval abbreviations were very numerous, especially in the fifteenth century: the reader will find a number of these explained in works on monumental brasses and on seals. The commonest method was to draw a horizontal line above the letter before the omission, or to place a comma after it but above the line (e. g. SIGILLV̄, SIGIL' = SIGILLVM, ROBTI = ROBERTI). In very common words almost all the letters may be omitted (S' = SIGILLVM, DNI = DOMINI).

LOCKS AND KEYS.

Mediaeval locks were almost entirely constructed on the ward system, in which obstacles are placed to prevent any but the proper key from turning the bolt. It thus differs essentially from the older tumbler system (*Guide to Roman Britain*, p. 44), in which an obstruction is introduced to prevent the bolt from being drawn by the wrong key, the tumbler, as General Pitt-Rivers pointed out, really forming, as it were, the bolt of a bolt. The Romans, who principally relied upon tumblers, had also begun to use wards, the development of which was continued by Frankish and later mediaeval locksmiths. With the progress of the Middle Ages the wards became intricate (fig. 106), but no amount of complication can make locks of this kind secure, and at some time during the eighteenth century, or even earlier, the tumbler principle was reintroduced. Down to the latter part of the sixteenth century locks were placed outside the boxes, &c., which they were intended to fasten, but at that period they were placed within, only the key-hole showing from the exterior. This change put an end to the manufacture of the beautiful forged iron locks of the fifteenth and sixteenth centuries, which often reproduced architectural forms and were enriched with statuettes or groups under canopies. Examples of such locks, the finest of which were made in France, may be seen at South Kensington.

Keys were commonly of bronze down to the fourteenth century, when they began to be made more frequently of iron. The ward-holes increase in number with the growing complexity of the locks; the stems usually terminate in some kind of loop or 'bow', often decorative, a feature which assists in determining the date. Characteristic forms of early mediaeval bows are the circular, ovate, and lozenge-shaped, the ovate type disappearing before the thirteenth century, while the lozenge-form lasts till the end of the fourteenth, during which the trefoil or quatrefoil also appears (*see top of the fine ivory casket, No. 368, Table-Case, Bay XXI*). Various forms are found in the fifteenth century, notably the

heart-shaped and kidney-shaped, while in the sixteenth century the key became a work of art, handles or 'bows' being filled

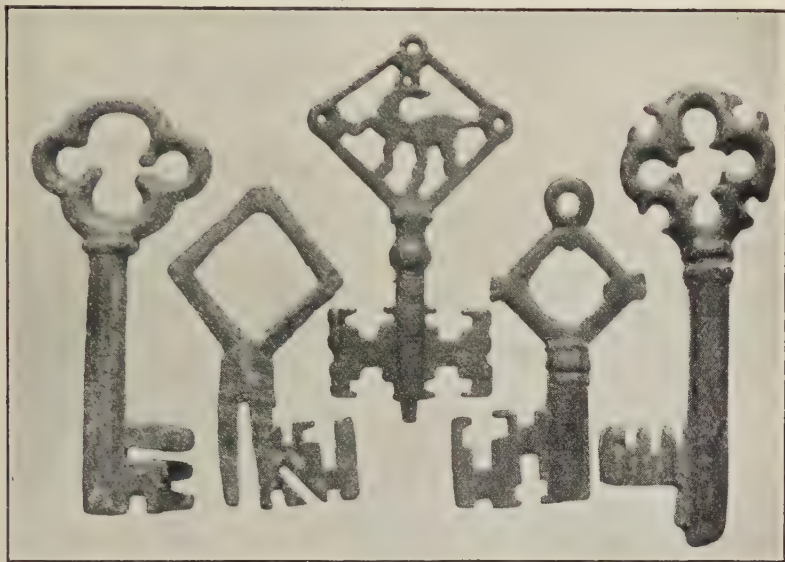


FIG. 106.—Keys of the fourteenth century.

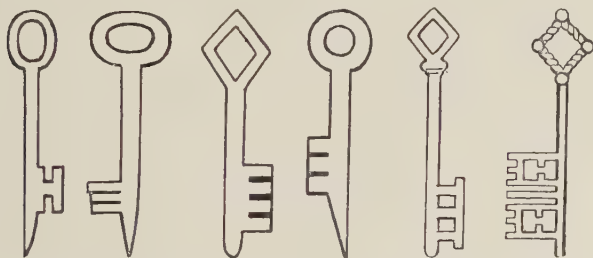


FIG. 107.—Mediæval keys. The first four from the left are from tombstones of the twelfth to fourteenth centuries at Bakewell, Gateshead, Newbigging, and Bamborough (after Cutts); the fifth is from the Exeter Corporation Seal, end of the twelfth century; the sixth from the seal of the Mayor of the Staple of Westminster, 1393.

with ornament, and sometimes taking the form of adorsed or confronted monsters or other figures, standing upon the capitals of columns, the shafts of which are represented by the stems.

But the stems themselves remained short and undecorated until the seventeenth century, when they assumed more elegant proportions, and were often ornamented.

The precise dating of mediaeval keys is often a difficult matter, as they are seldom found under conditions which in themselves make certainty possible. The frequent representations in works of art are thus of great value. Keys occur on tombstones and other sculptured monuments such as the font of Kirkburn in Yorkshire, on seals such as that of the city of Exeter (about 1180) and that of the Mayor of the Staple of Westminster in 1393 (fig. 107), and on stained-glass windows and frescoes, where they are seen in the hands of St. Peter, as on the portable altar, plate XIII.

Keys were carried suspended from the girdle on a kind of *châtelaine* known from the sixteenth century as the *clavandier*.

Attention may be drawn to the keys in the Window Case, Bay XV, and to the fine series of chamberlains' ceremonial keys, used at various courts from the seventeenth century to modern times, exhibited in Table-Case 1.

LOMBARDIC. See p. 157.

MAGIC.

The word magic is derived through the Latin *magia* and its Greek original, from an Oriental word probably of Median origin, and signifying the wisdom of a *magus* or seer. Belief in magic is of immemorial antiquity and universal distribution; while the sense ascribed to the word has at different times comprised every variety of theory and practice which aims at producing results transcending the laws of nature. It has thus been intimately connected at different stages of social evolution with medicine, astrology, and religion; and in its more primitive phases was not necessarily concerned with the evocation or control of personal spirits. This last was an aspect which became more prominent as civilization advanced, while at the same time the names of gods and spirits, whether written or recited, assumed an increasing importance as 'names of power'. Both Egypt and Babylon possessed at an early date highly developed systems of magic, and both played a most important part in disseminating magical knowledge. The Babylonians originated almost in its entirety the astrology later adopted by the European nations; they also filled the universe with innumerable spirits, and laid great stress upon the occult powers of numbers.

The confused mass of Babylonian and Egyptian magical ideas was sifted and classified by the Greeks, the Romans, and the Jews.

Alexandria became the great centre of magical belief, and there in the third century the Neo Platonists attempted to combine it with Greek philosophy. The Gnostics continued to work upon similar lines, associating magic with Christianity, and extending the use of invocations, diagrams, and talismans. The Jews after the Captivity had developed from Babylonian sources a whole classification of angels and demons, and it was they who immediately inspired the mediaeval magic of Western Europe, for in the thirteenth century the Spanish Jews compiled the Kabbala, an exposition of theosophic doctrines drawing largely upon the earlier Greek compilations from oriental sources. The prominence of the Jews as transmitters of magical knowledge explains the frequency of Hebrew letters in mediaeval talismanic inscriptions; and the varied nature of the sources from which they drew in like manner accounts for the strange mixture of barbarized Greek and oriental names in magical formulae. The Islamic revival of



FIG. 108.—Italian gold ring of the fourteenth century inscribed with Luke iv. 30, used as a charm.

the thirteenth century was also of great importance for the transmission of ancient astrological ideas to the mediaeval world.

This hybrid character marks a great number of the inscriptions upon mediaeval rings, brooches, and other objects, the purpose of which is either to attract beneficent influences or avert those which are evil (*see under Rings, magical*, p. 151). They are 'names of power' like those in which the ancient civilizations believed, some of them belonging to spirits of earth or of the stars, others associated with the Christian religion, others again, like the names of the Three Wise Men (Magi) from the East (Caspar, Melchior, and Balthasar), forming a link between Christianity and the ancient home of oriental magic. The belief in the power of numbers, which the Babylonians had originated and the Pythagoreans handed down to later ages, is another great feature in mediaeval magic, as also was the faith in the efficacy of certain figures, especially the pentagram, which had been used as a sign of fellowship by the followers of Pythagoras. Passages of Scripture implying the exertion of supernatural power were also commonly transcribed, in order that a similar power might pass to the person who made use of the inscription. Such was the verse *Iesus autem transiens per medium illorum ibat*, &c. (Luke iv. 30),

which is of frequent occurrence on mediaeval rings and brooches, being supposed to extricate from situations of danger and more especially from the assaults of robbers (fig. 108). Among the most frequent magical words are *AGLA*, which is compounded of the initial letters of four Hebrew words meaning 'Thou art great for ever, O Lord', and *ANANIZAPTA*, regarded as a specific against the falling sickness.

Mohammedan magic was in part descended from the Jewish lore of angels and demons, in part from the more ancient beliefs

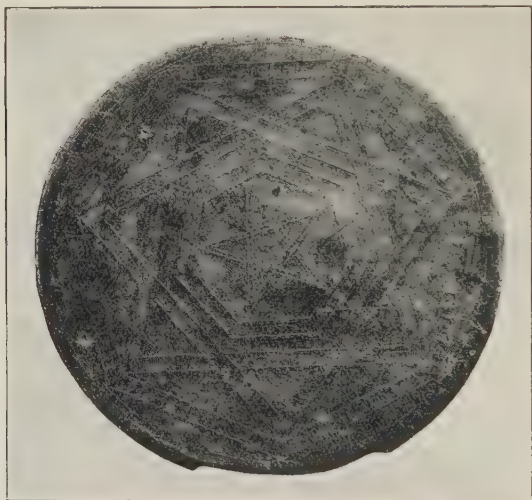


FIG. 109.—Wax disk engraved with magical names and figures ; used by Dr. Dee.

of Hither Asia, in part again from the compilations of such Greek writers as Claudius Ptolemy. It moves in the same atmosphere as the magic of the Middle Ages, and it has often been observed that the methods of the magicians in the *Arabian Nights* are quite in harmony with those of their European contemporaries. The magic of the Further East, of India, Tibet, China, and Japan as exercising no direct influence upon that of Europe, must here be left out of account.

The astrological side of magical belief preserved the deepest hold upon the belief of the educated, and persisted through a great part of the seventeenth century. For though the revival of science which accompanied the Renaissance had dealt the power of magic a severe blow, the practice maintained its influence considerably

later, not only among the ignorant, but among the educated classes ; the works of Cornelius Agrippa of Nettesheim, and of Jerome Cardan illustrate the general tendency to superstitious belief. The three wax disks (Table-Case, Bay XVI, fig. 109) engraved with pentagrams and other geometrical figures, as well as the names of various spirits, are of interest as having belonged to the celebrated Dr. Dee (1527-1608), the mathematician and astrologer. It would appear from one of Dr. Dee's manuscript diaries, that these disks were to be used with the table upon which the 'shew-stone', or magic mirror, was placed. Four smaller disks, only two of which are in the collection, were put under the legs of the table,



FIG. 110.—Amulets of the seventeenth century. That on the left, which is of silver, is for the conjoint influence of Venus and the Moon.

and the larger one upon the top of it ; the table was then draped with a silk cloth, and the stone placed over the large disk as it lay under the cloth. Whether the sphere of crystal exhibited in the same case is the 'shew-stone' itself is less certain ; the stone which had the best claim to the title is a flat mirror of obsidian (doubtless of Mexican origin) once in the possession of Horace Walpole. But it would appear that Dr. Dee used more than one stone ; and as some rough marginal notes in his diaries seem to indicate a spherical object, it is possible that the Museum stone may have been the 'Chrystallum' in which many of the visions appeared. All four objects are believed to have come to the Museum, together with some of Dee's diaries, with the Cottonian Library, which had been bequeathed by Sir John Cotton to the nation as early as the year 1702.

Among the inscribed metal amulets in the same case are several European examples of the seventeenth century. Such objects were

carried on the person or deposited in certain spots with the object of bringing good or evil fortune to an individual or a place; curious examples inscribed with maledictions (like the classical *dirac*) and dating from the sixteenth to the seventeenth century have been found in England at Lincoln's Inn (London) and Richmond (Yorks). The beliefs which prompted their manufacture are based upon the Kabbala, according to which the Universe consisted of ten concentric spheres, the two outermost those of the *Primum Mobile* and the *Zodiac*, the next eight from Saturn (No. 3) to the Earth (No. 10), those of the planets in their order. Each planet was considered to affect a certain sphere of human activity; and as each had its own genii or spirits, able to confer or withhold definite advantages, it was essential for a man who desired success in life to know the mystic symbols of the planets and the names of their various spirits. Both the planets and the spirits, good or maleficent, had their 'sigils' or 'signatures', marks of monogrammatic form, and the planets were also represented by human figures, corresponding more or less to mythological ideas, an armed man representing Mars, a nobleman Jupiter, a female figure Venus. In addition, each planet had its magic square, formed by a series of numbers in equal rows, so arranged that the sum of each row, whether vertical, horizontal, or diagonal, is the same. The sum of all the rows, of the separate rows, and this sum multiplied by the number of the planet, all had their importance and their own mystical names. Thus the number of Saturn being three, each row in his square contains three numbers each making fifteen; Jupiter's number being four, each row in his square contains four numbers adding up to thirty-four; the number of Venus being seven, each row in her square contains seven numbers, adding to one hundred and seventy-five. The numbers are frequently written in Hebrew, and mistakes are not uncommon. Signatures, figures, and magic squares are the staple subjects upon these amulets, with the addition of the names of angels, spirits, and numbers, the names being often inscribed in an outer border. Though as a matter of fact great latitude prevailed, each amulet should really be made of the metal of its own planet, very carefully prepared. Thus for Jupiter the metal should be tin, for Mars iron, for the Sun gold, for Venus copper, for Mercury coagulated quicksilver, and for the Moon silver. Of the seven amulets of this class in the Museum Collection, two have the signature of Jupiter, one that of Mars, and three that of Venus.

The belief in magic was sapped by the rationalism of the eighteenth and almost destroyed by the advance of science in the nineteenth century.

MATRICES OF SEALS.

The *matrix* of a seal is the thick piece of metal or other material in which the design is cut in intaglio: the word seal, though properly denoting the impression made from the matrix, usually in wax, more rarely in thin metal, is commonly used in a wider sense including both matrix and impression. The collection in the King Edward VII Gallery is composed of matrices accompanied by modern impressions: the Museum Collection of ancient impressions is in the Department of Manuscripts. (Selected examples, including the Great Seals of English Sovereigns, in Table-Cases L and M in the Manuscript Saloon.)

The most usual metal for the matrix of a seal was bronze, but silver was frequently employed, while gold was chiefly restricted to princes. Lead was in common use among poor persons; iron or steel was chiefly employed after the Renaissance. About the eleventh century a considerable number of matrices were made of ivory, a material which occasionally reappears in later times (examples from the seventeenth century in Table-Case, Bay XVIII). Precious stones cut in intaglio are rare, though a few were made by mediaeval engravers, chiefly, it is supposed, in Italy. Antique Roman intaglio gems, were, however, used to seal documents from Carolingian times, Charles the Great himself possessing a gem engraved with a Jupiter Serapis: stones of this kind, mounted in finger-rings, were the earliest seals of all. The commonest forms of mediaeval matrices are the circle and the pointed oval. From the twelfth century to the Renaissance the Church usually employed the pointed oval, after the sixteenth century the oval form; no symbolical significance attaches to the shape.

The most ancient mediaeval matrices are those of Frankish times. The Carolingian emperors and kings in the ninth and tenth centuries sealed with gems bearing their own busts, the style being probably suggested by Roman coin-types. Only one of these matrices now survives, a crystal intaglio of Lothair II, King of Lorraine (d. 869), mounted in a reliquary-cross in the treasury of the Cathedral of Aix-la-Chapelle; but impressions of several others are to be seen upon documents. In England, Æthelwulf of Wessex used a seal in the year 857. The Museum is fortunate in possessing the leaden bulla (p. 173) of Coenwulf, King of Mercia (about 800-10), as well as three matrices belonging to non-royal persons, which date from the period before the Conquest. These are the brass or bronze matrix of the seal of Æthilwald, Bishop of Dunwich (about 850); that of Ælfrie, alderman of Hampshire (about 985), in the same material; and the fine eleventh-century ivory matrix of the thane Godwin. All of these are exhibited in the Iron Age Gallery

(Table-Case D, section 3) and described, with illustrations, in the *Guide to Anglo-Saxon Antiquities*, pp. 110, 111. The use of seals became general in the twelfth century.

Any adequate classification of seals would be needlessly intricate for the purposes of the general reader. They may be roughly divided into two main classes—Ecclesiastical and Secular. Subdivisions of the former class are seals of persons holding ecclesiastical offices (popes, bishops, abbots, deans), and common seals of corporate bodies (chapters, religious colleges, monasteries, &c.).



FIG. 111.—Silver matrix of the seal of Chichester Cathedral.
Early thirteenth century.

The principal classes of secular seals are those of kings and officials, of courts of law, corporate bodies (towns, universities, guilds, hospitals, schools), and of private persons.

Most seals have a surrounding legend, consisting either of the name and titles of the person or corporation, or of some motto. The designs themselves are naturally determined by the position of the owner. Thus royal seals, which in England begin with Edward the Confessor (impressions in the Manuscript Saloon, Table-Case L), generally have on the obverse the monarch seated on the throne, and on the reverse the monarch armed and mounted. Seals of bishops usually have the effigy of the bishop, standing, or, less conspicuously, kneeling before the Deity or a patron saint; those of admirals a ship. Seals of religious corporations have

sacred subjects, such as the Crucifixion, Annunciation, Coronation of the Virgin, or the Trinity, some of them introducing a view of their church, like the remarkable matrix of Boxgrave Priory,



FIG. 112.—Matrices of seals. At top, Joanna, daughter of Henry II of England. At bottom, Robert Fitzwalter (on the left); John Holland, second Earl of Huntingdon, Admiral of England, Ireland, and Aquitaine, 1435-42 (on the right). In the middle, Black Canons' Priory of St. Denis, Southampton.

Sussex, in Table-Case, Bay XVIII; the fine silver matrix of Chichester Cathedral (fig. 111) bears as device an earlier church. Seals of towns, which had common seals from the beginning of

their corporate existence, usually show a view of the town walls or of some conspicuous building such as the castle or cathedral. This is the case with the earliest English municipal seal, that of Exeter, dating from about 1180. See also the early German municipal seals in Table-Case, Bay XVII.

Upon secular examples the devices are figures of the owners (mounted knights, ladies standing erect, as in fig. 112); animals, monsters, and birds (lions, dragons, eagles), and floral and other motives (*fleur-de-lys*, crescents, stars, &c.). In the course of the twelfth century heraldic devices were introduced, and henceforward used by all entitled to bear arms. The middle classes, who were not so entitled, used motives similar to those already described, as well as punning devices representing the owner's name, grotesque and satirical figures, and signs and symbols of crafts. The legends are usually in Latin or the vernacular of the several countries. In England English is used from the fourteenth century, though Latin and French continued to predominate. The characters on English seals are Lombardic (p. 157) down to about 1350; and black-letter from this time until the Renaissance. Seals preserve the same general character throughout the whole period between 1200 and the Renaissance, though they differ very widely in detail. The character of the designs changed with the progressive evolution of the Gothic styles, and following the development of monumental sculpture, especially in the canopies and traceries which accompany the figures; and the designs themselves naturally afford valuable indications of the successive changes in ecclesiastical, military, and civil costume. It may be noted that after the end of the fourteenth century no ladies other than queens are represented upon seals. The forms used throughout the period are chiefly the pointed oval and the round.

The official seals of kings and persons holding high civil or religious office, if not buried with the owner, were commonly broken or rendered useless at his death. Thus the seals of deceased abbots and bishops were sometimes broken in the presence of the chapter, or before the altar after High Mass. The seal of William de Toucy, Bishop of Auxerre (d. 1182), was broken with an axe and buried with him. Seals might also be broken at times of revolution. Thus the people of the Low Countries, on renouncing their allegiance to Philip II of Spain, broke his seal. Seals of municipal bodies were not exposed to such dangers, and the splendid series of matrices belonging to English corporations, though sadly diminished from other causes, begins with the close of the twelfth century. As from the twelfth to the fifteenth century inclusive it was generally the seal which gave validity to an act, it is obvious that the wrongful retention of a matrix might lead to grave abuse. This was actually the case after the death of Henri IV of France, when, as Sully records in his

Memoirs, the Chancellor kept the Great Seal and issued false letters patent for a period of five years, the King's signature not being required when the Great Seal was used. The Chancellor was usually responsible for the Great Seal, and carried it about with him: Roger of Hoveden relates that when the Chancellor of Richard I of England was drowned in the Mediterranean he was carrying the royal seal suspended from his neck. In the chapters and abbeys it was likewise the Chancellor of the house who kept



FIG. 113.—Matrices of seals. At the bottom, seal for the delivery of wool and hides at Winchester, reign of Edward I. At top, seal of the Weavers' Company (on the left), Customs Seal for the port of Carmarthen, *temp.* Edward I or Edward II (in the middle), Seal for labourers' passes, Hundred of Wangford, co. Suffolk (on the right).

the matrix, though sometimes it was locked in a case with as many as five separate keys. In days when writing was not a universal accomplishment, the custody of the matrix was a matter of the greatest importance, and its loss was a serious matter. In case of loss the owner usually made a public declaration cancelling the old seal, afterwards issuing a second announcement describing the new matrix adopted. A similar course was followed if a matrix became too worn for further use, or if a man grew tired of it and wished for another; or again, if he rose in the world or changed his office. Thus a squire becoming a knight would have a new seal;

so would a bishop on removing from one diocese to another. Monastic and cathedral seals were renewed when worn out, or perhaps when there was a change in artistic taste: they rarely belong to the date of the original foundation.

Down to the beginning of the eleventh century seals were usually applied direct to the face of the parchment; but after that time the practice of appending them to the document upon strips of parchment or cords came into vogue, and by the twelfth century was universal: it is illustrated by numerous examples of charters exhibited in the Manuscript Saloon (Cases V and VI). By this custom a second surface was made available, and a second seal, called the counter-seal, was now used. This has commonly no obvious connexion with the other; but as the second surface permitted the amplification of the subject or legend upon the first,



FIG. 114.—Intaglio gems mounted in silver and used as seals. Thirteenth and fourteenth centuries. The gem on the left is mediæval and probably cut in Italy, the other two are antique.

advantage was frequently taken of this opportunity. Where the seal and counter-seal were of the same size, the matrices were provided with loops in which pegs were fixed, in order that the two matrices should fit exactly one over the other. The *secretum*, or private seal, could be employed on occasion as a counter-seal, but was also used alone for private correspondence, for which the larger baronial or knightly seal was not necessary. A large class of intaglio gems both ancient and mediæval, well represented in the collection, were used as private seals, appropriate legends (*secreta te go, secretum servare volo, &c.*) being engraved upon the metal borders of their settings (examples in Table-Case, Bay XVIII, fig. 114): after 1200 the use of the *secretum* was common among barons and knights. Secondary seals became a necessity as correspondence and business increased; for, as already noted, the important official seals of religious and other corporate bodies were often kept under several locks, of which different persons had the keys; moreover, the presence of numerous witnesses was essential to the

attestation of the deed on which it was used. In some towns all the burgesses were summoned to witness the apposition of the municipal seal. This procedure was too cumbrous for everyday affairs, and for this reason monasteries and other bodies provided themselves with lesser seals, *ad causas*, i. e. for current business : many of these are to be seen in the collection.

Attention may here be drawn to the seals used for the customs, and for the delivery of wool and hides, which are interesting in connexion with mediæval commerce and administration (Table-Case, Bay XVIII, fig. 113) : also to the group of rough, unpretentious seals used to authenticate labourers' passes under the Statute of Cambridge of the year 1388. During the period preceding the rising under Wat Tyler numbers of villeins and serfs had begun to leave their homes in the country in order to obtain freedom by residence of a year and a day in the towns. This led to a great scarcity of labour, while many of these men became vagrants and robbers, to the public danger. The Statute provided that all persons changing their abode must produce passes sealed with a seal giving the name of the county, hundred, rape, or wapentake in which they lived. The matrices in the Table-Case, Bay XVIII (fig. 113), are examples of those used in sealing these passes.

The art of engraving matrices reached its highest point in the later thirteenth and during the fourteenth century ; from the first half of the fifteenth century the work declines in quality. Many English seals have survived from the best period, which excel any contemporary work on the Continent : especially those of religious foundations, and the fine quality of this branch of the glyptic art makes it all the more probable that the small number of contemporary carved ivories which have been preserved does not fairly represent the capacity of English workmen. It would be difficult to imagine a finer seal than that of Merton Priory in the thirteenth century (Manuscript Saloon, Table-Case M, section *b*). With the Renaissance, seal-engraving underwent the change which affected all the arts. The figures are treated in a freer style ; architecture, if introduced, is classical or classicizing, and inscriptions are in the Roman character. But the art did not maintain the relatively high position which it had enjoyed in the Middle Ages, and as time advanced matrices were more often characterized by mechanical finish than by real artistic distinction. In the seventeenth century the use of wafers instead of wax led to shallower cutting of the matrix ; while the introduction of the embossing-press for stamping paper dealt a further blow to the seal-engraving art. It is impossible to go into details with regard to post-mediæval seals, good specimens of which may be seen in the table-cases of seals, especially among the Italian examples (Bay XVII). We may notice that signet-rings, which had been used in the earlier

period, became very popular from the sixteenth century, when armorial signets of massive gold were frequent (examples in Franks Room). The revolving three-sided fob-seals engraved on steel, came into use in the early eighteenth century.

Mediaeval matrices are usually provided with a pierced loop at the back, by which they were suspended: the smaller matrices often have a handle terminating in an openwork trefoil. Sockets for the insertion of a handle made of different material did not come into use until the Renaissance. In some examples of very elaborate design several matrices were required to make a single impression, as in the case of the seals of Southwick Priory and of the Monastery of Boxgrave.

Criminal records show that false matrices were made in the Middle Ages, for which death might be the punishment: banishment and branding were not uncommon. In 1356 the Chevalier Bouchard de Poissy was banished from Paris and fined 4,000 livres for forging a seal. Supposing the originals to have been lost, it would be impossible for us now to distinguish such ancient falsifications, if they were engraved and not cast. Modern forgeries or reproductions, which are very numerous, can usually be detected by the quality of the surface, and by the want of precision in the sunk device. Such imitations are not cut in intaglio, as were the originals, but cast from impressions; and as many of these are exceedingly worn, there often results an almost total lack of detail. In a forged matrix, the deepest part of the intaglio, which in the original is most protected from abrasion, shows the least detail, because in the impression, from which the mould has been taken, this part is in the highest relief and therefore most worn. Where it is possible to compare a forgery with the genuine old impression from which its mould is taken, it will be found that the latter will not fit into the supposed matrix. The reason of this is that the cast metal contracts on cooling: the real matrix, not having been subjected to heat, is necessarily larger than its impression.

Questions concerning the material used for impressions do not directly concern the collection of matrices, but a few facts with regard to it may be conveniently mentioned. Every effort was made to produce a durable wax, for the whole fortune of a family or corporation might depend upon the seal: if it were lost or badly mutilated, the title to estates might lapse or pass into new hands. The legal advisers of St. Louis on one occasion pointed out to him that he was perfectly justified in resuming possession of a domain, because the seal upon the document by which it had been granted to the heirs of the Countess of Boulogne was broken and imperfect. The king refused to take advantage of the occurrence, and the fact is noted as a proof of exceptional nobility of character. To increase the durability of wax, fine hairs or threads were sometimes

mixed with it, resin, pitch, or chalk being sometimes found; and the surface of the seal was covered with a hard varnish. Seals were often sewn up in little bags or placed in capsules of wax; from the fifteenth century cases or boxes of white metal were used to enclose them. Down to the twelfth century colourless wax was most often used; then red and green were introduced, the latter not till the close of the century: other colours which came into use were yellow, brown, black, and, more rarely, blue. Individuals used colours indifferently, but chancelleries and corporate bodies often adhered to a single colour.

The word *bull*, or bull, is confined to impressions made not in wax but in metal, and used especially in countries where wax would be affected by the warmth of the climate. Lead was the most frequent metal, and has generally been used by the popes; but gold was frequently employed by princes. A gold bulla of Edmund, second son of Henry III. as King of Sicily, is in the Franks Room (Central Desk-Case); in the Manuscript Saloon are exhibited gold bulls of Baldwin de Courtenay, Emperor of the East (dethroned 1261), and of the Emperor Frederick III. In the same saloon is a bull of Pope Innocent III in lead (Cases V and VI). Instruments said to have been used for making bulls of Paul II (1464-71) and Pius II (1458-64), and a leaden bull of the former, are exhibited in Table-Case, Bay XVII, of the King Edward VII Gallery.

It may be added in conclusion that mediaeval seals are not dated. In England, the first dates occur in the reign of Elizabeth.

MAZERS.

Among examples of old English plate mazers are of conspicuous interest (figs. 115 and 116). These are shallow bowls used as drinking-cups, usually made of spotted or 'bird's-eye' maple, whence the name, which is of German origin and signifies a spot; they are not to be confounded with the ordinary wooden or 'treen' cups which were in general use during the Middle Ages, the commoner sorts being of beech. Mazers represented the best class of wooden cup, and were therefore deemed worthy of the metal mounts which bring them within the category of silver plate. They are without handles, and commonly have round the rim an ornamental silver, often gilt, band almost always with an inscription, a low or high metal foot, and a metal boss, usually engraved with a figure, conventional ornament, or initials in the centre known as the 'print', the purpose of which is uncertain: it has been suggested that the claw-setting inside a mazer at All Souls College, Oxford, may once have held a prophylactic gem. In late examples the band and foot are sometimes

connected by vertical bands, known as straps, which may also bear inscriptions. Many mazers had covers, though few are now in existence; the cover was surmounted with a handle or knop of precious metal, and had a metal rim. The Franks Bequest contains two covered mazers, one Flemish of the fifteenth century, the other of the sixteenth century and German. Mazers were in use from the thirteenth to the sixteenth century, and were especially common in England, where some monasteries (as at Durham) had one for every brother, with larger examples for general use, often bearing special names after the mediaeval fashion. Thus at Canterbury in 1328 there were mazers



FIG. 115.—The Rochester mazer with name of Robert Pecham and London date-letter for 1532-3.

called 'Austyn' and 'Pylegrym', and at Battle in 1437 one named 'Fenix'. The print usually has a silver plate engraved or enamelled with some device, often, but not always, religious. The inscriptions, which are in Latin, French, or English, may be either religious or convivial, a good example of a convivial inscription being this, of about 1420 :

Hold yowre tunge and sey the best
And let yowre neybores sitte in rest,
Hoeso lusty the God to plesse
Let hys neybores lyve in esse.

Other mazers have the name of the Society to which they were given and the donor's name: thus one of the mazers in the Franks Bequest (fig. 115, Franks Room, Case C), which has the London date-letter for 1532-3, has on the band, in Latin: 'Cup of the Rochester refectory, (given) by brother Robert Pecham.' Mazers

are also found in the possession of churches; in some country parishes they have even served as alms-dishes. Only some fifty mazers now survive. Those of the fourteenth and early fifteenth centuries have rather deep bowls, with plain, narrow bands, and of these about a dozen remain. From about 1450 to about 1550 the bowls are shallow, and the bands often broad, in order to increase the capacity of the cup. Of this period at least twenty-six are now in existence. Elizabethan mazers have straps connecting the band and foot, but examples of this kind are even rarer than the others. Inscriptions are in black-letter down to the end of the fifteenth century: at



FIG. 116.—Mazer with Latin motto. About 1470.

the beginning of the sixteenth century a peculiar form of capitals is substituted, as in the example shown in fig. 115.

Covered cups, usually of wood, in form resembling mazers, but with handles, and dating from the fifteenth century, were probably for the most part made in Germany and Switzerland, though some may be English. Sometimes they were entirely of metal, as the fine cup from the Hamilton Collection now in the Franks Bequest; this, however, now has no cover.

MERCHANTS' MARKS.

These are devices of a monogrammatic character usually composed of a private cipher with the initials of the owner's name: the brass, fig. 183, and the rings, figs. 98 and 117, will give an idea of their appearance. The almost invariable appearance of the cross in

these marks has been explained by several conjectures. According to one, Christian merchants trading in the East and the Levant required some obvious sign to distinguish their bales from those of Mohammedan merchants. Another supposes that the cross was used to thwart the demons by which tempests were held to be incited. A third connects the cross with the symbol of St. John the Baptist, patron-saint of the wool-merchants, by whom so many

of these marks were used. Merchants' marks, which are frequently engraved on rings, were commonest from the fourteenth to the sixteenth centuries; and English merchants probably first borrowed them from the Flemings. Though for the most part used by persons not entitled to bear arms, they were also employed by others, and are seen, for example, side by side with arms on sepulchral monuments of the fifteenth century. The tomb of William Canynge, the famous merchant, in St. Mary Redcliffe, Bristol, shows both the arms and the mark of the deceased. Marks of the same kind were used by bell-founders, and by printers from about 1470 to 1520, and the more complex examples with initials chiefly belong to the sixteenth century.

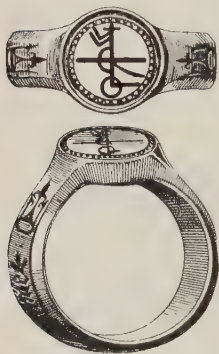


FIG. 117.—Gold ring with merchant's mark. Sixteenth century.

A fifteenth-century stained-glass window in the Cathedral of Tournai representing the weighing of merchandise, shows bales with merchants' marks depicted upon them.

METAL WORK.

It is impossible in so limited a space to do more than indicate the general development of metal work; whole groups of objects are treated under separate headings (Brasses, Enamel, Jewellery, Niello, Pewter, Plaquettes). The sculpture in metal produced during the Renaissance, other than plaquettes, is omitted, as being practically unrepresented in the collection; fine examples may, however, be seen at South Kensington. Attention is chiefly devoted to the mediaeval centuries (Carolingian, post-Carolingian and Romanesque, and Gothic), with a few remarks on the work of the Renaissance and later times.

I. The Carolingian period, named after the Emperor Charles the Great (768–814), succeeded that of Early Teutonic art (see *Guide to the Anglo-Saxon and Foreign Teutonic Antiquities*, 1923). That art, chiefly represented in metal by small objects obtained from graves,



PLATE X. CHEF, OR HEAD-RELIQUARY; WOOD OVERLAID WITH SILVER.

THIRTEENTH CENTURY.

[See p. 39.]

was formal and geometrical in style, avoiding the imitation of natural objects, unacquainted with foliate ornament and modelling in relief, and producing its effects by contrast of colour or of light and deep shadow (cf. p. 135). It was a popular art, and devoted to objects of popular use.

When Charles the Great organized his new empire, the long-persisting pagan custom of burying objects with the dead had



FIG. 118.—Ewer (aquamanile). German. Thirteenth century.

come to an end. The surviving metal work of his own time and that of his successors does not represent a popular art, but was made for ecclesiastical use. The Carolingian period brought a new style into the West. It used figure-subjects in relief and foliate ornament adopted from the Christian East through Italy, and chiefly of Greek, Syrian, or Coptic origin. Even though East Christian ornament, as distinct from figure art, followed methods of design identical in principle with those of northern Europe in pre-Carolingian times, the forms themselves were different, while the figure-subjects, influenced by Graeco-Roman art,

introduced a fundamental change. Nature was now imitated, the exclusive reign of the old formal art of design came to an end. Moreover, new processes were adopted. Gems polished as cabochons with rounded surfaces replaced the flat table-garnets, and were fixed in raised settings; filigree was applied to the spaces between them; cloisonné enamel (p. 77) was employed. The change was not abrupt; for a time the old often overlapped the new. Thus on the chalice of Tassilo, Duke of Bavaria (d. before 788), at Kremsmünster, and on the older of the two covers of the Lindau Gospels, now at New York, which is of much the same date, a northern influence preserved the old pagan ornament together with sacred figures belonging to the new order, though these were not yet in relief. But before long the new features predominated even in ornament, we find figures in repoussé surrounded by raised gems and filigree, with new ornamental motives, such as arcading, and palmette or acanthus elements. It may well be that in personal ornaments of metal made and used by the people, the ancient northern traditions of formal design continued; unfortunately, things of this kind, being no longer deposited with the dead, have not been preserved like the more precious objects safely kept in churches. The Church not only preserved these objects; she encouraged her servants to make them. The monasteries had their workshops in which metal-workers were trained with no less care than illuminators and scribes. Even outside the monasteries, churchmen with exceptional talent for craftsmanship devoted themselves to this work, following the example of Eligius (St. Éloi), who lived in the Merovingian age (d. 659). But the monastic workshops were the chief centres of activity, and remained so until late Romanesque times, a period of several hundred years.

The advance of Italian and Eastern influences encouraged by Charles the Great was slower in the case of metal work than it had been in that of illumination, for the illuminated book was the first thing to be copied. The earliest example is found in the great altar-frontal in the church of St. Ambrogio at Milan, executed before 835, where embossed figure-subjects of admirable quality are combined with subordinate decoration in cloisonné enamel. Similar reliefs on a smaller scale occur on two well-known book-covers: on the upper cover of the above-mentioned Lindau Gospels, and on that of the Codex Aureus at Munich; they further occur on the ciborium of the Emperor Arnulf in the same place. In all these cases the reliefs are accompanied by sumptuous borders of gems in high and often elaborate settings, between which is filigree of gold. It is an art altogether distinct from that of pagan-Teutonic times, and the elements which lend it its character are all East Christian in their origin. These elements lasted for a very long time, subject to modification as styles and fashions altered, but undergoing no fundamental change. They persisted long after the



FIG. 119.—Bronze ewer in form of a mounted knight. English. About 1300.

Carolingian age proper, which closed with the ninth century. This survival may justify the awkward term post-Carolingian, here applied, for lack of a better, to the art of the tenth and eleventh centuries; there is no satisfactory comprehensive term for the period between the decline of Carolingian art and the full development of Romanesque in the twelfth century.

II. The post-Carolingian period is marked by the increase of Byzantine influence in the West, due to the revival of art in the East Roman Empire after the iconoclastic disturbances (*Guide to the Early Christian and Byzantine Antiquities*, 2nd ed., 1921, pp. 48 ff.). This art penetrated Italy, and spread north of the Alps to the great monastic houses, like that of St. Emmeram at Regensburg (Ratisbon); its advance was further assured by the diplomatic relations of the Saxon Emperors with the court of Constantinople, and by the marriage of Otto II with the Byzantine princess Theophanu. These facts explain the growing predominance of Germany in the art of working metal. Carolingian tradition still persisted in the use of gems and filigree, and plaques embossed with figure-subjects. But Byzantine and Byzantinizing cloisonné enamels were more and more frequently inserted among the gems; the style of the figure-subjects is often Eastern, and typically Byzantine scroll-work is employed. The Byzantine influence is found in combination with Carolingian features on objects made at Regensburg: these are a book-cover now at Munich, with enamels, embossed figures, gems, and filigree; the crown of Gisela, and the portable altar of Henry II in the same place, the latter reproducing features on an earlier Carolingian book-cover. The finest example of the Eastern influence at Regensburg, is, however, the gold altar-frontal of Henry II, now in the Cluny Museum at Paris. Here the embossed figures and surrounding scrolls are of Byzantine inspiration, though the strong plastic sense of the artist is original. At Regensburg itself, on the back of a book-cover of Henry II, there is also an early example of *opus interrasile*, in which the background of figures engraved on a plate of silver is cut away, so that the design may be thrown up against a dark background, a style which remained popular throughout the Romanesque period. But the greatest centres in the tenth and early eleventh centuries were Trèves in the time of Archbishop Egbert (973-93), and, in the eleventh century, Essen, where there was a monastic workshop, and where royal ladies of the Saxon imperial family presided over a house of canonesses. The surviving work of Egbert's time at Trèves, Gotha, and elsewhere shows a rich use of small plates of cloisonné enamel executed in the Byzantine manner, and the occasional use of threaded pearls, together with gems in raised settings and filigree. At Essen the Byzantine influence is seen at its height in the crosses of the abbesses, richly set with stones and with enamels, some actually

Byzantine, others local work in the Byzantine style. The embossed figure-subjects are of fine quality, as are engraved figures of Evangelists' symbols on the back of a cross and of a book-cover, some of the work being heightened by punching the ground in diaper. A sword with gemmed hilt, has a scabbard with scrolls

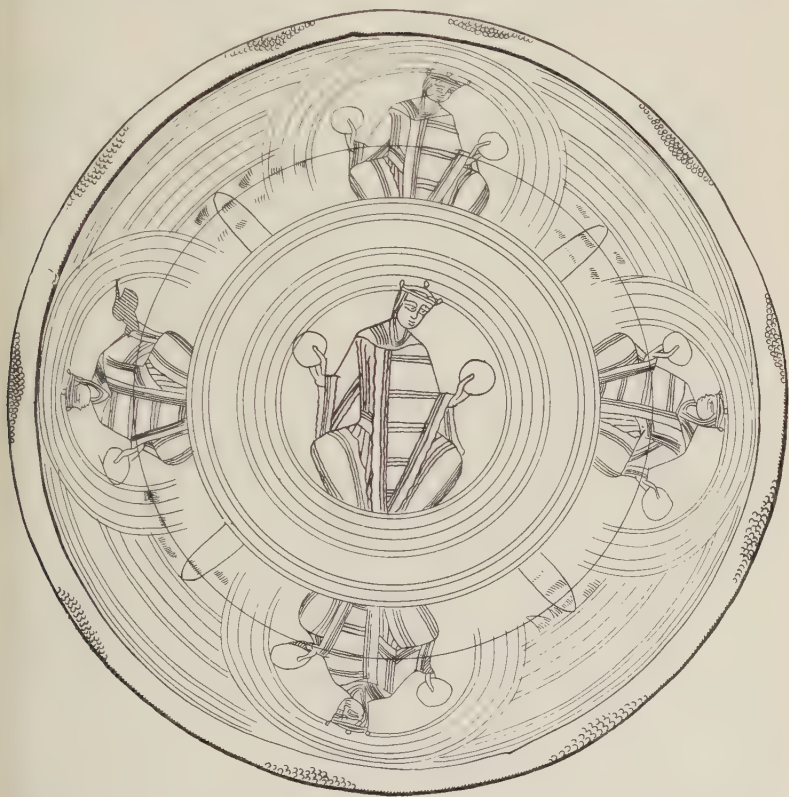


FIG. 120.—Bronze bowl engraved with figures of Virtues. Twelfth century.

of Byzantine style. Cast bronze is represented by a seven-branched candlestick dating from the time of the Abbess Mathilda (973-1011); but this is thought to have been imported from Constantinople. Sculpture in the round, on the other hand, is a distinctively Western feature. It is illustrated by a wooden statue of the Virgin and Child dating from 1039-56, and covered with plates of beaten gold; we have here a revival of plastic art in the West, of which still earlier examples are found in France.

While the work produced at Essen thus largely reflected Byzantine models, Hildesheim under the art-loving Bishop Bernward (993-1022) showed originality and independence, though Bernward doubtless derived suggestion and inspiration during his visits to Rome. The most remarkable works made under his guidance were objects of cast bronze on the monumental scale; a column with spirally ascending reliefs, suggested by Trajan's column at Rome, and great bronze doors of the Cathedral (casts in the Victoria and Albert Museum). Though their reliefs are rude, by their original power and the bold use of what was practically a new method, these works remain milestones in the history of Western bronze-casting. But the Hildesheim workshop produced objects of smaller size, some cast in silver. In addition to a crozier-head there are two high candlesticks with interlaced dragons and nude human figures on the feet; on the sides are men, birds, and animals in scroll-work: these candlesticks are forerunners of that of Gloucester (p. 189). In the time of Bishop Hezilo (1054-79) was executed the great crown-light in the Cathedral, again a precursor of later examples elsewhere. Cut-out scrolls are applied to the sides, and this style of work, already noted at an earlier period at Regensburg (p. 180), is also seen on the back of a gemmed cross made for Hezilo. Three flabellum-like processional crosses are also remarkable for their open-work, but belong to the twelfth century. Hildesheim did not adopt the use of cloisonné enamels after the fashion of Trèves and Essen.

The metal work of the eleventh century as practised in Germany is described by a master himself, working at that time at Paderborn. This was Roger of Helmershausen, who wrote under his monastic name of Theophilus about the year 1100, and came to Paderborn from the Essen workshop, where he had received his first training. All the processes illustrated in the above-mentioned objects are minutely described by him: casting, engraving and punching, embossing, *opus interrasile*, stamping, gilding, and cloisonné-enamelling. The portable altar of Abdinghof, attributed to him, has engraved figure-subjects of admirable vigour cut out to show clearly against a dark underlying background. His treatise, the *Diversarum artium schedula*, is of extraordinary interest for the history of craftsmanship.

During the tenth and eleventh centuries the production of ecclesiastical metal work in the north of France had been on a less extensive scale. The gold chalice and paten, and the gospel cover of St. Gauzelin (Gozlin) (d. 962) at Nancy, enriched with gems and cloisonné enamels in chatons, all on a filigree ground, are objects of great splendour, and the Byzantinizing enamels upon them are earlier than those of Trèves. Another book-cover in the Louvre, executed to the order of Beatrice, Sister of Hugo Capet, in 1000, has gold repoussé figures and Evangelists' symbols in cloisonné enamel

at the corners; the book-cover at South Kensington from Sion Abbey in the Valais is in a related style. Mention must also be made of the rich tenth-century mounts with gems and filigree on the sardonyx cup from Saint Denys, now in the Cabinet des Médailles at Paris. In the south of France the work of this time is best illustrated in the Treasure of Conques in the Rouergue. Here the seated statue of St. Foy, in beaten gold on a



FIG. 121.—Massive bronze knocker. Twelfth century.

wooden foundation, has a barbaric impressiveness, and is of great interest as an example of sculpture in the round at the earliest time of its revival in the West; as a work of the late tenth century, it is older by some fifty years than the above-cited statue of the Virgin and Child at Essen, produced by the same method. It is richly decorated with gems in raised setting, and with filigree. The beginnings of enamelling on copper at Limoges are represented in this Treasure by a portable altar executed in cloisonné, an adaptation of the Byzantine method to the less costly medium

of copper: between the enamelled medallions and plaques are gems on a filigree ground. Conques has also reliquaries with embossed figure-subjects. The metal work of the south of France at this period is less advanced than that of the north, but in both cases the processes of earlier times are retained; there is no striking innovation other than the attempt to produce sculpture in the round. In Spain there is a similar conservatism; here, too, we find gems amid filigree, and the embossing of thin plates of metal. In Italy, there is closer imitation of Byzantine models, especially in the eleventh century. Bronze casting on the large scale is illustrated by the doors of St. Zeno at Verona, though the figures in relief are rougher than those at Hildesheim.

In England the work of this period is represented chiefly by late Anglo-Saxon personal ornaments, such as nielloed gold rings (p. 202); the remarkable cloisonné-enamelled objects known as the Alfred Jewel and the Minster Lovel Jewel in the Ashmolean Museum at Oxford, and the Dowgate Hill Brooch in the British Museum (*Guide to Anglo-Saxon Antiquities*, p. 101), suggest that enamelling of this kind, as well as granulated work, was executed by native goldsmiths. The fine quality of Anglo-Saxon illuminated MSS. and ivory carvings at this time (p. 120) shows that the standard of craftsmanship in the monasteries was very high; metal work of a less sumptuous kind is not likely to have been neglected, though the surviving examples are few. The top of an architectural bronze censer found at Pershore in Worcestershire, signed by the maker Godric, and perhaps dating from the early eleventh century, is part of what must have been an unusually fine example; the collection contains an object somewhat similar in form but of twelfth-century date, found in the Thames near London Bridge (fig. 123). The bronze seal-matrix of Ælfric is mentioned on another page (p. 165).

Something is said of Byzantine metal work in the *Guide to Early Christian and Byzantine Antiquities*, 2nd ed. p. 127, and examples of early silver plate may be seen in the Christian Room. The principal source of our knowledge is the Treasury of St. Mark's at Venice, where there are no less than thirty-two chalices and several patens, many of which have original metal mounts, though the vessels themselves are rarely of metal. Book-covers and flat, slab-shaped reliquaries for wood of the True Cross exist in fair numbers; they are usually of wood covered with thin plates of silver-gilt on which figures and scroll and foliage designs are executed in repoussé work, and occasionally with filigree. The borders and ground are enriched with cabochon stones in raised settings with numerous small panels and medallions of cloisonné enamel, the latter often bordered with pearls. The mounts of several of the chalices at Venice are thus ornamented with stones

and small circular medallions often framed in pearls. Byzantine churches were rich in bronze lamps, the *polycandela* or *coronae* being of considerable size. A bronze reliquary in the form of a Byzantine church preserved in the Cathedral Treasury of Aix-la-Chapelle may have suggested the form of the elaborate Rhenish enamelled reliquaries with domes, of which a fine example is in the Victoria and Albert Museum. Common points between the work of the East and West at this time are the extensive use of repoussé



FIG. 122.—Bronze centaur playing a stringed instrument, and bronze lion. Thirteenth and fourteenth centuries.

work, with filigree, cabochon gems, and small plaques of enamel. After this the West went its own way and devised new styles of its own.

The most conspicuous examples of Byzantine metal work on a large scale were bronze church doors damascened with silver, which may be noted on account of the process by which they were decorated. Several dating from the eleventh century were exported to Italy and are still in whole or in part preserved: at St. Paul's without the walls, Rome, only fragments remain, but at Monte Cassino, Amalfi, and Salerno complete doors exist. The splendid bronze doors of St. Sophia at Constantinople are rather earlier, belonging to the ninth century.

III. The twelfth century, with the beginning of the thirteenth, is the true period of the art commonly called Romanesque. In this

century the monastic workshops began to yield their supremacy to those conducted by laymen. Cities increased, with organized craftsmen and well-to-do citizens able to give them encouragement and occupation. But for a long time yet the Church remained the chief patron, and by far the greater part of the fine metal work produced was still executed on her behalf; when scriptural and symbolic subjects were used, as was very commonly the case, they were executed under the supervision of monks and clerics.

If the tenth and eleventh centuries were the age of embossed silver and cloisonné enamel, the twelfth was the period of cast bronze and *champlevé* (p. 81), which admitted greater breadth of treatment. The Romanesque period shaped and fashioned with boldness; it developed to a higher point the sculpture in metal which the preceding centuries had begun. Though some of the greatest of its earlier sculpture in stone was executed in the south of France, most of the fine metal work was produced in the north. The Rhine and north Germany maintained their old activity, but Lorraine, and especially the valley of the Meuse, now rose to pre-eminence. Mention has been made under **Enamel** (p. 81), of the masters in *champlevé* who worked in the cities of the Meuse and Rhine valleys, travelling to other districts on the invitation of art-loving patrons like the Abbot Suger of Saint Denis. In the present section, we are only concerned with these masters in their capacity of metal-workers and sculptors.

The earliest Lorraine metal-worker, Reiner of Huy, was not celebrated as an enameller. In 1112 he made the cast bronze font at Liège with four baptismal scenes of fine design, the whole marking a great advance on the casting of Bernward at Hildesheim a hundred years earlier, and showing a definite superiority over the later font at Tirmont, made in 1149. Reiner's work on a smaller scale is illustrated by the fine spherical bronze censer now in the Museum of Lille. Godefroid de Claire, the famous enameller (p. 82), did not equal Reiner in sculpture. He preferred the old methods, and in place of casting bronze, embossed figures in silver; the finest of these fill the arcades round the sides of the great gable-roofed *châsses*, made at this time for relics of famous local saints. The greatest of all the metal-workers was Nicholas of Verdun, whose period of activity falls in the end of the twelfth and in the early part of the thirteenth century. His enamels have been already mentioned (p. 82); here special note may be taken of the fine crestings of cast bronze made for two great *châsses*, one at Siegburg, the other at Cologne, with small figures of men and beasts, full of life and vigour, engaged in the convolutions of a rich scroll-work. He also worked in *repoussé*; his figures of apostles and prophets on the sides of the large shrine of the Three Kings at Cologne (about 1200) rank with the great achievements of mediaeval

sculpture in metal. In the field of ornamental design, Nicholas was one of the first to express the feeling for nature which was to mark the plant-ornament of the Gothic period. A similar tendency is seen in the applied metal scrolls, varied with plaques of niello, characterizing the work of Frère Hugo of Oignies near Namur, to whom the beautiful crozier in the collection (pl. IV) is attributed.

Aix-la-Chapelle in Romanesque times was naturally affected by



FIG. 123.—Top of a bronze censer (?). Twelfth century.

influences both from the Meuse and the Rhine. The principal name connected with the city is that of Wibert, who, after 1166, made the great crown-light in the cathedral, though the engraved figure-subjects are not all by his own hand; his style shows a relation to that of Frederic of Cologne. He may have made, in whole or part, head-reliquaries (*chefs*) now at Capenberg and Düsseldorf, and an engraved silver bowl at the former place. Shrines of the early thirteenth century at Aix-la-Chapelle are in the style of his school. A numerous group of bronze bowls engraved in the interior with legendary, scriptural, and symbolic subjects dates from

the twelfth century, and may have been chiefly produced in the region of the Meuse; the collection contains interesting examples, especially that with the legend of St. Thomas (fig. 124), found in the Thames. Hildesheim remained a centre for German metal work in late Romanesque times, producing repoussé sculpture and the cut-out work of the old tradition. Brunswick and Magdeburg cast bronze on the large scale; the great lion in the former place dates from 1166; from the latter centre came the bronze doors of the Cathedral of Novgorod in Russia, made in the middle of the century. The period saw the production of numerous smaller bronze objects (candlesticks, censers, *situlae*, ewers, &c.), in various north German centres, especially in Saxony. Objects of gold and silver from this time are rare.

South Germany remained faithful to the Byzantine influences of earlier times; a two-handled chalice at Wilten in the Tyrol illustrates this relationship. The nielloed cross of St. Trutpert in the Black Forest is a clumsy but effective work of the late twelfth century; the Monastery of Engelberg in Switzerland has a large cross with repoussé figures of fine quality.

In France, as in Germany, the north of the country was more advanced than the south. The metal work of north France in the twelfth century is closely related to that of the Meuse and west Flanders. But a fine feeling for form is evident in the silver ciborium in Sens Cathedral (about 1200), and in the gold chalice of St. Remy at Reims; the great bronze foot of a candelabrum in the latter place seems to show influence from the Rhine. The mounting of an antique porphyry vessel in the form of an eagle, executed for Suger at St. Denis, is impressive in its monumental simplicity; other antique vessels were mounted with gems and filigree in the traditional manner. The north made little use of enamel, though the fine crozier found at Chartres, and now in the Museo Nazionale at Florence (p. 82), may have been enamelled there, with a few other objects in a similar style.

Limoges in central France was chiefly famous in this period for its enamels (p. 84), some of which covered large bronze effigies like that of William de Valence in Westminster Abbey. But sculpture in wood, overlaid with plates of gilded silver in the early fashion has survived, and is well illustrated by the *chef* of St. Baudinus at St. Nectaire; while numerous crosses were produced, covered with silver and enriched with gems and filigree. Small cast figures in bronze were made to be applied to enamelled shrines and crosses; but these were seldom of much merit; the production soon became commercial.

The metal work produced in Italy in the Romanesque period shows less originality than that of the northern countries. But

the altar-frontal of Citta di Castello, with its rude, but powerful embossed reliefs, shows that Italian craftsmen were able at this time to break free from the Byzantine model. The practice of *champlevé* enamel in Spain has been already mentioned (p. 84). The mutual reactions between the north of Spain and France are



FIG. 124.—Scenes from the legend of St. Thomas the Apostle, engraved in the interior of a bronze bowl of the twelfth century.

sometimes difficult to follow, but as in sculpture and architecture, so in metal work, the initiative at this period seems to have chiefly lain with France.

The elaborate and boldly conceived candlestick from Gloucester, now in the Victoria and Albert Museum, dating from the earlier

twelfth century, shows that English craftsmen were capable of fine work in metal. Though nothing else of equal merit has survived, we know from Matthew Paris that Gloucester was not the only centre, but that Anketil of St. Albans worked both in that abbey and in Denmark; he and his pupil, Solomon of Ely, made a great silver-gilt reliquary set with gems. Walter of Colchester, also of St. Albans, who worked at the beginning of the thirteenth century, is recorded to have made altar-frontals with subjects in relief, as well as a statuette of the Virgin and two gospel covers. The Salisbury inventory of 1214 describes crosses, gospel covers, and other objects of rich workmanship. In Ireland, where fine work was now being done, such as that on the Cross of Cong, the old national traditions were retained. The art has nothing in common with that of the countries which had adopted the Carolingian revival, and with the European developments of the succeeding centuries.

IV. The style which succeeded Romanesque grew out of it at different times in different countries in the thirteenth century, but earliest in the north of France. It is commonly known as Gothic, a word first applied to it in a disparaging sense by the Italians, to whose classical taste it seemed barbarous. This inappropriate term was carelessly adopted for general purposes in relatively modern times, but is now too firmly established to be easily discarded. Except in Italy, where it never really took root, the style lasted for about three hundred years, from before the middle of the thirteenth century to a similar period in the sixteenth. For the first half of this time, down to about 1400, its tendencies were idealistic and aristocratic; during the second half it developed along realistic lines, patronized and supported by civic communities enriched by commerce.

In the Gothic period architecture and sculpture were pre-eminent, and their influence dominated the other arts. In metal work we sometimes find whole buildings reproduced in miniature, but more frequently members and details, such as arches and canopies, often combined in fanciful constructions, or applied as reliefs to flat surfaces; figures of sacred persons, angels, and saints, or groups of figures, were architecturally framed. The chief metal employed ceased to be copper enriched with *champlevé* enamel. Silver now took the principal place, and translucent enamel on sunk relief (p. 86) was adopted for its decoration. The silver sculpture was both cast and beaten, though the old style of covering a wooden core with applied silver plates survived for certain larger objects such as the *chefs*, or head-reliquaries, which now became popular (plate X).

The great reliquaries in the form of simple rectangular buildings with gabled roofs, such as those made on the Rhine and Meuse in the eleventh and twelfth centuries, now went out of fashion;

more elegant types replaced them, canopied and pinnacled in the new manner; the fine shrine of St. Gertrude, at Nivelles in Flanders (about 1280), shows Our Lord seated in a portal above which is a traceried rose-window under a gable. Smaller reliquaries of various types combine silver statuettes with niches and canopies, often in open work. The workmanship in French examples of the thirteenth and early fourteenth centuries is often of the finest quality. Where jewelled work was added, cabochon gems in raised settings alternated with filigree, as in earlier centuries, though the filigree was now of a richer and more plastic style, the wire twisted cable-wise and interspersed with pellets, &c. The new art gained in richness of articulation, but it was impoverished in colour by the diminished use, or the abandonment of *champlevé* enamel on copper, though the adoption of translucent enamel did much to make good the loss. In central France Limoges long continued to make *champlevé*, retaining Romanesque forms much later than the north.

The development of the Gothic style naturally introduced North-French influence in all neighbouring countries. The French manner was imitated everywhere, spreading even into north Italy. But Italy, with her own sculptural tradition and her latent feeling for classical forms, never produced the often slavish imitations common in other countries. There is a difference in the style of the figures; antique elements and mouldings are introduced, and round arches are seen among the Gothic pinnacles. Reliquaries, crosses, and other objects, often enriched with translucent enamel in central Italy, especially at Siena (p. 86), illustrate the phases of this peculiar Gothic, which with all the fineness of its elements has a certain incongruous and exotic air. Spain in the fourteenth century was strongly influenced by Italy.

England, like Germany and Flanders, followed French models. Unfortunately, little metal work has escaped the destruction of the sixteenth century. The fine bronze effigies of Henry III (d. 1272)



FIG. 125.—Bronze statuette of a lady and her dog. Fourteenth century.

and his queen Eleanor (d. 1291) in Westminster Abbey are the work of William Torell or Torel, goldsmith and citizen of London, whose family name, if of Italian origin, had been borne in England for generations. The monumental figure of Edward III in the same church is thought to be by one of Torel's pupils. The effigy of Richard Earl Beauchamp (d. 1439) at Warwick, accompanied by weepers, is inferior to the above. Other metal sculpture known to have existed has been lost, such as William of Gloucester's silver figure of an infant daughter of Henry III, formerly in Westminster Abbey. Among minor works of art we may note the already-mentioned silver censer and incense-boat from Ramsey Abbey in the Victoria and Albert Museum (p. 36), the large fourteenth-century bronze jug in the collection with badges of Richard II and rhymed English mottoes (Pier-Case, Bay XVI, E), and the aquamaniles in the form of a mounted knight and another horseman in the same case, which may well have been made in the country in which they were found.

In the later part of the Gothic period, from the beginning of the fifteenth century onwards, the centre of gravity shifted from ecclesiastical to secular art. The reliquaries are less costly; neither the quality nor the spirit of the sculpture is the same. The realistic tendency and the growth of individualism changed the whole character of the work. The exhaustion of France after the wars with England made the court of the Dukes of Burgundy the chief centre of wealth and luxury; Flemish influence increased, asserting itself throughout Europe, and not least in Spain, where it now largely replaced that of Italy. Church plate was still produced in great quantities; the monstrance (p. 200), in which the Host was displayed, was now very frequent; in Spain, the heavy tower-like *custodia* for the same purpose was a characteristic development.

In bronze casting, both on the larger and smaller scale, the Low Countries took the first place, though Germany did not forget her old traditions; fonts in the old manner of Hildesheim were still produced, and a great seven-branched candlestick of this age is at Frankfurt on the Oder. But Flanders, especially Dinant, was now the chief centre of bronze casting. Many remarkable lecterns were made for churches, mostly in the fifteenth century, though the fine example at Tongres is rather earlier. Better known are the numerous utensils and small objects known (after the name of Dinant) as *linanderie* (candlesticks, ewers, basins, and other objects of domestic use). Among the most interesting of these are the ewers in the forms of animals, monsters, and men (Pier-Case, Bays XVI and XVII), which continue an earlier tradition in a new manner. Though Dinant was the chief place of manufacture for objects of this kind, they must have been produced in other countries, for all the western kingdoms were acquainted

with metal-casting, and were able to make their own church bells. Ewers, tripod pots, and other utensils, probably of English origin, are shown in Pier-Case, Bay XVII.

V. The artistic revolution which followed the Revival of Learning, brought back to favour the forms and methods of classical art. It fostered the plastic sense, the feeling for clear and logical construction, the love of harmony and symmetry, the imitation of Nature under her more amiable aspects. At the same time it encouraged individuality and the energetic development of personal talent. These were great gains, but not attained without corresponding losses in discipline and devotion, though such losses were already felt in the later period of Gothic art. The Renaissance began in Tuscany, where the new classicizing forms were universal by 1450. In the north and south of Italy and in the countries of north-western and central Europe the change began later, and was not universal until the early sixteenth century; when Italians had been practising the new style for fifty years, other peoples were still clinging to Gothic forms. The most important medium for the metal worker of the Renaissance was bronze, the sculptor's chosen metal, though much was still done in silver. The development of bronze sculpture in this period lies beyond our scope, except as regards plaquettes which are separately noticed (p. 215); the sculpture of the period as a whole must be studied at the Victoria and Albert Museum. Many bases for crosses, holy-water buckets, censers, ciboria, frames for paxes, and other ecclesiastical objects were made in this metal; in these we mark everywhere the sense of balance and feeling for structure. Classical ornament is freely introduced; where the human figure is presented, it has the naturalness of Hellenistic sculpture quickened by the eager individualism of the time. Secular work in bronze includes door-knockers (Italian examples in the Waddesdon Bequest, Nos. 3, 4), candlesticks, caskets, hand-bells, inkstands, mortars, and other objects of domestic use, largely produced at Padua and Venice.



FIG. 126.—Bronze relief. Anne of Brittany (1476-1514).

In the latter city oriental craftsmen taught the Venetians the arabesque. These oriental masters followed the tradition of the older silver-inlaid metal work of Mosul, Cairo, and Persia, examples of which are in the Asiatic Saloon (Cases 84-91); their Italian pupils developed the arabesque in their own manner and so passed it on to western Europe, where in adapted forms it figures largely in Renaissance ornament.

Iron work was not neglected, but in this field we can only mention the fine damascened work produced chiefly at Milan, and in Spain, for armour of parade (shield by Giorgio Ghisi in Waddesdon Bequest, No. 5) as well as for sumptuous cabinets and smaller objects. Italian goldsmiths' and silversmiths' work, produced, as documents show, in very great quantities, survives in a mere remnant, mostly executed for the Church. Fine silver bases of crosses are illustrated by that in the Baptistry at Florence, in the making of which Pollaiuolo shared, and that of the enamelled 'Calvary' at Gran in Hungary; but the work of the great masters has for the most part been lost. Among smaller objects in silver may be mentioned the paxes with crucifixions and other subjects in niello (p. 203).

With the later or 'High' Renaissance of the sixteenth century, the northern countries beyond the Alps all adopted classical forms; the secular element now gained ground on the religious. The production of table silver in France, Germany, and England was on a large scale owing to the growth of commerce and the general increase in the number of wealthy citizens and corporations. In jewellery (p. 140) these countries are better represented by surviving work than Italy, though often they developed ideas originating with Italian artists like Cellini. English work in the time of Elizabeth had a national character which, in spite of defects, lends it an interest of its own.

VI. As the revolt against mediaeval feeling had begun in Italy, and was followed at intervals by other countries, so at the close of the sixteenth century, Italy led the revulsion against the exclusive classicism of the humanists. She began a reaction against the logic, the symmetry and rationalism of the Renaissance by introducing the Baroque style, which in art was contemporary with the Counter-reformation in religion. The derivation of the word baroque is not too certain, but the essential meaning conveyed is that of irregularity. The style aimed at the unsymmetrical, the curvilinear, the profuse; it followed enthusiasm and impulsive sentiment rather than balanced reason, surrendering to the delight in untrammelled form. As the seventeenth century advanced, the leadership in this style passed to France, where, in the time of Louis XIV, it was developed on the majestic lines characteristic of that reign. The Protestant countries had continued to use the forms of the Renaissance until this period, but the England of the Stuarts,

more and more dominated by French ideas, accepted the new influence chiefly at the Restoration, when rich scrolls and exuberant forms appear in English metal work. At the close of the reign of Louis XIV, when there was a general desire to be rid of the pompous and the stilted, the baroque passed into rococo,



FIG. 127.—Bronze pedestal. Sixteenth century.

a fashion aiming at lightness and caprice, and combining naturalism with elegance of fantasy. Rococo in France prevailed during the Regency and the reign of Louis XV, especially characterizing the period of this king; the style was never followed in its purity in England, where it was blended with other elements. A classical reaction against the rococo style gradually set in, due in no small degree to the study of the antique by archaeologists in various countries; by about 1770 it was fully established. As the basis

of archaeological knowledge was now wider and sounder than ever before, classical forms were more exactly imitated, and the intrusive elements which the Renaissance had welcomed were now excluded ; it was a colder and less genial art, fitly succeeded by the Empire style.

MINOR OBJECTS.

Apple-scoops. Implements of bone and ivory used in eating fruit were known to the Romans, and are mentioned by Pliny and Columella. The earliest examples of the apple-scoop are of bone cut like a gouge. Ornamental types appear about the end of the sixteenth century, sometimes combined with other objects such as tobacco-stoppers or whistles. Though usually of bone or ivory, they were now sometimes made of silver ; wood, in which the Museum possesses an example with date 1656 (Table-Case, Bay XV), was less common.

Brushes. Hair-brushes are mentioned in a document of 1402, but no existing examples are likely to be earlier than the sixteenth century. Combs, on the other hand, are of very great antiquity (p. 118).

Gravouères, (broches, brochettes). These were instruments like large styli, and commonly of ivory or bone, used for parting the hair. They were thick at the upper end, where they usually terminated in sculptured figures. A number of gravouères of the fourteenth and fifteenth centuries are preserved in French and Italian museums, and there is a good example in the Victoria and Albert Museum at South Kensington.

Nut-crackers. These were used in the Middle Ages in a form not differing essentially from that now in use, and a curious example with extremities in the form of human heads is exhibited. But in the seventeenth century nut-crackers in which the pressure was applied by means of a screw were common, and were often made of wood (Table-Case, Bay XV, and fig. 128).

Scissors. Scissors were in use throughout the Middle Ages, though some of the types appear to have resembled what we should now call shears. By the beginning of the fifteenth century, however, representations show types approximating to those now in use, though actual scissors of mediaeval date are of great rarity.

Shoe-horns. These objects do not seem to have been used before the sixteenth century, to which the earliest literary references and actual shoe-horns belong. Some of the examples of the period of Elizabeth and James I are richly engraved with ornament and figure-subjects. The best of these date from about 1600, and the several English examples are signed by Robert Mindum. An engraved shoe-horn is exhibited in Table-Case, Bay XV.

Spectacles. The spectacles which were used in the Middle Ages were not made of glass, but of pebble (rock crystal or 'beryl'). They appear to have been known from the thirteenth century, when they were mounted somewhat in the manner of the modern folders, though without a spring. A miniature in a French manuscript of about 1380 shows spectacles of this kind. One of the first Englishmen to wear them was Henry Bowet, Archbishop of York (1407 23); the accounts of his executors contain the entry: *Pro pare de spectakeles de argento et deaurat*, the value being given as twenty shillings. King René of Anjou (d. 1480) also possessed spectacles mentioned in his inventories. Early forms of spectacles may be seen in mediaeval sculpture, painting, and stained

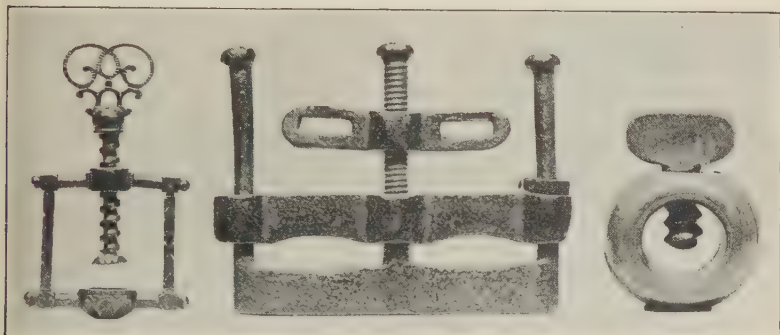


FIG. 128.—Nut-crackers (to right and left). In the middle, iron thumbikins.

glass, as also in pictures of the fifteenth and sixteenth centuries, especially those of the Flemish and German Schools.

Thimbles. Thimbles are mentioned as early as the twelfth century, and had been used from more ancient times. They were doubtless made of bone as well as of metal, and leather was also employed. Latten thimbles are referred to in the thirteenth century, but actual objects are difficult to date owing to the general similarity of known examples; apparently the more ancient specimens were less finely pitted on the outer surface than those of later date. In Queen Elizabeth's inventory appear: 'a nedell case of cristall garnysshed with silver gilt, with two thymbles in it'; silver thimbles of an early date are rare, but they were apparently common in the seventeenth century: a silver thimble of the time of Charles II is in Table-Case, Bay XV.

Thumbikins were instruments of torture, used especially in Scotland, by which one or both thumbs were compressed through the action of a screw. In the Register of the Privy Council of Scotland,

1684, it is ordained that 'whereas . . . ther is now a new inventione and Ingyne called the thumbekins . . . [the Lords] ordaine that when any persone shall be (by ther order) put to torture, that the saids thumbekins or bootes or both be applyed to them'. There is in the collection a pair of iron thumbikins (Table-Case, Bay XVI, and fig. 128) given to Sir Samuel Meyrick by Sir Walter Scott, who alludes to this instrument more than once in his works; the National Museum of Antiquities at Edinburgh possesses a pair said to have been employed by the authorities of the ancient borough of Montrose for eliciting confessions from criminals.

Walking-sticks or canes, apart from the staves carried by pilgrims or officials, are rarely represented in art before the end

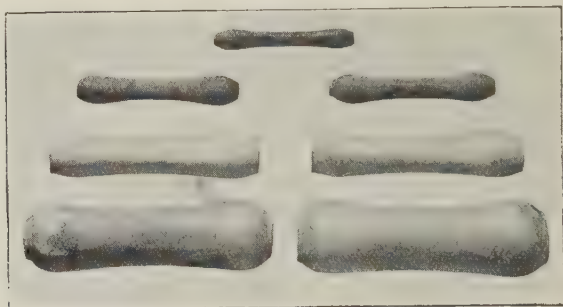


FIG. 129.—Pipeclay wig-curlers. Seventeenth century.

of the fifteenth century. Henry VIII had a number of walking-sticks, one of which is seen in his portrait at Warwick Castle, and numerous Elizabethan portraits represent persons carrying them. Cane was used for the purpose as early as Henry VIII, but was especially characteristic of the eighteenth century.

Wig-curlers. The process of curling the hair is mentioned by St. Aldhelm, Bishop of Sherborne, writing in the eighth century, who describes a wife having her locks delicately curled by an iron; the locks of the young squire in the *Canterbury Tales* 'were crull as they were laide in presse'. There are various later allusions in English literature to iron curling implements. Pipeclay curlers date from the seventeenth and eighteenth centuries, belonging to an age in which wigs were generally worn with curls of an ample curve (a few exhibited in Table-Case, Bay XV; cf. fig. 129). These seem to be mentioned in Sterne's *Tristram Shandy*, where Uncle Toby's great Ramillies wig is 'put into pipes' by Corporal Trim.

MIRRORS.

Mirrors, down to the Renaissance, were all of small size and usually circular. The majority were mounted in cases of wood, ivory, or precious metal, and carried about on the person. Examples of the carved ivory cases popular in the fourteenth and fifteenth centuries are exhibited in Table-Case, Bay XXI. Representations of ladies using such small mirrors are frequent in



FIG. 130.—Ivory mirror case. French. Fourteenth century.

illuminated MSS., and are also to be seen on more considerable works of art; for instance, the figure of Prudence in Giotto's frescoes in the *Capella dell' Arena* at Padua is holding such a mirror. Reflectors of the same size and form were sometimes fixed on stands and kept in the chamber, but probably the largest mirror known in the Middle Ages did not exceed the size of a plate.

The reflecting surface was usually of polished steel or other metal, and steel mirrors were still in use in the sixteenth century: in the inventory of the contents of the Palace of Westminster

in 1542, reference is made to objects of this kind. The same inventory also refers to a round 'looking glasse' of Catherine of Aragon, which was probably a polished metal surface with a sheet of glass over it. An arrangement of this sort had been employed since the thirteenth century, and Vincent de Beauvais, writing in 1250, says that a mirror of glass and lead is the best of all; and in the inventories of the Dukes of Burgundy, dating from the fifteenth century, we hear of the *verre à mirer*, evidently a looking-glass. A guild of glass mirror-makers existed at Nuremberg in 1373; in south Germany small convex mirrors (*Ochsenaugen*, or 'bulls' eyes') were made before the sixteenth century, and were in demand till modern times. Considering the great quantity of glass manufactured for windows from the thirteenth century onward, it would have been curious if the idea of employing a substance admitting of so high a polish had not suggested itself to the mirror-makers of the day. But until a really satisfactory metallic backing was discovered, the advantage of a looking-glass over a steel mirror would be slight, and this fact may account for the persistence of the latter for domestic use down to so late a period. The amalgam of mercury and tin which gives the modern looking-glass its efficiency was not known before the sixteenth century.

MONSTRANCES.

The Monstrance (*ostensorium*) was among the latest of sacred utensils. The Host was not exhibited for adoration before the Feast of the Holy Sacrament was instituted by Urban IV in 1264, and confirmed by John XII. in 1311 and 1315. In order that the Host might be visible, it was necessary that it should be contained in crystal or glass, like relics, which were commonly shown in horizontal crystal cylinders fixed in metal mounts or stands. The earliest monstrances were simply reliquaries of this kind; but the long, cylindrical form being ill adapted to the circular wafer, a new type came into use, perhaps as early as the second half of the fourteenth century. In this, the transparent portion is a crystal disk placed vertically in a frame of gilded rays. From the seventeenth century this has been the accepted form.

MORSES.

The morse is the brooch which fastens the cope over the breast. A jewelled circular brooch fastening the mantle of the high priest in this way in the scene of Christ before Pilate is seen in a mosaic of the sixth century in the church of St. Apollinare Nuovo at Ravenna, and simpler prototypes appear to be represented on

earlier Christian monuments. Such mantles with their fastenings appear to be the precursors of the cope and morse of later times. Mediaeval morses are often of great size, richly decorated and made of various material. Some were set with gems; in the case of the Crystal of Lothair (p. 103), mounted in the fifteenth century

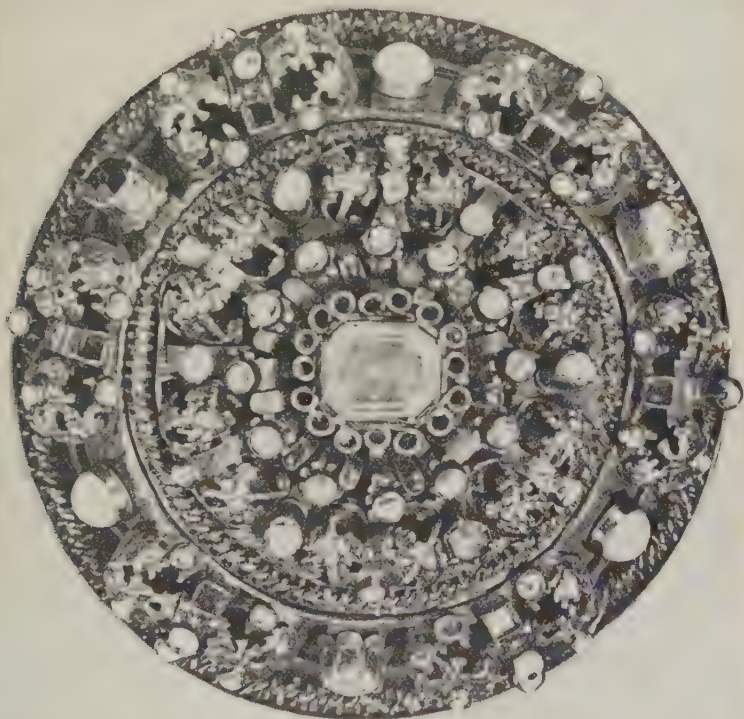


FIG. 131.—Jewelled morse. Hungarian. Seventeenth century.

as a morse, a single piece of crystal formed the body of the object. From the late twelfth century, *champlevé* enamel on copper was often used for morses; it was natural that the succeeding style of translucent enamel on silver should be employed in the same way; the example in the *Franks Bequest*, with its beautiful Sienese enamel, should be noticed (fig. 49). Fine morses with Gothic architectural motives are preserved in various museums; in the fifteenth century this type was very elaborate,

as we see from representations in paintings of the Flemish school. Two profusely decorated Hungarian morsers set with turquoises are also in the Franks Bequest (fig. 131).

NAPIER'S BONES.

These are sets of ten rods of wood, metal, or other material engraved with multiples, and used as aids for multiplication and division (Window-Case, Bay XV). Each of the four faces of every rod contains multiples of one of the nine digits, those on two of the faces being complementary to the other two. By the use of this contrivance, any number less than 11,111 may be multiplied, as well as any number which can be formed by the top digits of the rods when placed side by side. Napier's bones were devised by John Napier of Merchiston (1550-1617), inventor of logarithms, and are described in his *Rabdologia*, published in 1617.

NAVETTES. See p. 36.

NIELLO.

Niello (derived from the Latin *nigellum*, on account of its blackness) is a compound of silver, lead, copper, and sulphur, the composition varying with occasion. Niello is fusible at a low temperature, and applied to metal (usually silver) in much the same way as enamel, though it is not vitreous in substance. Niello was known in ancient times; it is said to have been used in Egypt. The Romans used it freely, especially for decorating silver plate, examples of which may be seen in the Gold Ornament Room. In the Eastern Empire it was employed in the same manner, as well as for the decoration of finger-rings and articles of jewellery: Byzantine silver plate so ornamented may be seen in the Christian Room (Wall-Cases 8 to 12), and gold rings in the Franks Room (Table-Case). The Franks and Anglo-Saxons also decorated rings with niello (examples in the Iron Age Gallery, Table-Case D 2). Theophilus (p. 182) makes mention of niello; and ecclesiastical objects were decorated with it in his time. By the beginning of the thirteenth century it was extensively used, and a fine example of its application at this time is the crozier made by Frère Hugo of Oignies in Pier-Case, Bay XIX, plate IV. About the middle of the fifteenth century the art of engraving silver with designs and subjects to be filled in with niello was very popular in northern Italy, especially at Florence, and rings and other small pieces of jewellery were so ornamented (Table-Case in Franks Room), but also objects such



PLATE XI. SILVER BEAKER AND COVER WITH SUBJECTS IN NIELLO.
FIFTEENTH CENTURY.

[See p. 203.]

as paxes (p. 210) and cups, which from the greater extent of their surfaces permitted the reproduction of elaborate figure-subjects. The fine silver beaker (Franks Room, Case D) illustrates the use of niello designs to ornament a large surface (plate XI); it was probably made in Flanders after engravings by one of the early masters. The manufacture of niello plaques was formerly supposed to have exercised an important influence on the arts of printing and engraving. In order to judge of the progress of their work, the artists were in the habit of taking proofs at intervals, first making a cast in which the lines appeared in relief, and then from this a sulphur mould in which the lines were filled in with black. The first proof which can be dated was taken from a Florentine pax with the Coronation of the Virgin, dating from the middle of the fifteenth century and formerly attributed to Tommaso (Maso) Finiguerra. Recent research has, however, made it probable that this and other proofs were not taken directly from the silver plate, as was formerly supposed, but from the sulphur mould. Be this as it may, there was no intention of multiplying copies for popular use: the honour of first engraving metal plates for the press belongs not to Italy but to Germany, and it may be noted as a curious fact that printing from engraved designs on metal was never discovered by the artists of the early Middle Ages, though much of their work was more or less adapted to the purpose. When in modern times the great twelfth-century Crown Light in the Cathedral of Aix-la-Chapelle was taken down to be cleaned and repaired, impressions from the subjects upon it were taken and actually published; doubtless other mediaeval metal work would yield equally good proofs. Many great Italian artists worked in niello, among others Pollaiuolo and Francesco Raibolini (Francis), and Cellini described his method of employing it at some length.

Examples of work in niello, of interest for its relation to engraving, are preserved in the Department of Prints and Drawings.

NOCTURNALS. *See* p. 72.

NUMERALS.

For Roman numerals see under **Dates** and **Lettering**. The so-called Arabic numerals in universal use at the present day, though known to a few European scholars as early as the tenth century, were still rare in MSS. of the thirteenth century, and only became common, even in books, in the century following. Their first appearance upon *monuments* was formerly considered to date from about the middle of the fifteenth century, and this is certainly the earliest time at which they became at all general on

buildings or on works of art ; but modern investigations indicate that the Arabic numerals on the sculptures of the West Front of Wells Cathedral form an exception to this rule, and may be as old as 1250.

Arabic numerals have never entirely superseded the earlier Roman system, which is still often used on clocks, and for dates on buildings or on the title-pages of books. Fig. 132 shows some earlier variants of the figures 2, 4, 5, and 7, the remaining figures differing little from their present forms. All these variants are older than the year A. D. 1310, except the last three examples of 5 and the last example of 7, which are of the sixteenth century. The figure 5 varied very much in that century, and some of its forms resembled those which French handwriting has preserved to this

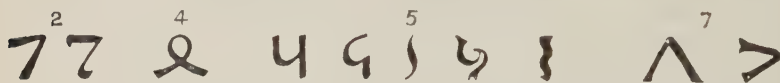


FIG. 132.—Early forms of Arabic numerals.

day ; the Arabic form may have been an adaptation of the Roman. The last 7 shows how the old figure became the new by being turned on its side ; generally speaking, the upright modern form suggests a date. The last 2 begins to approach the modern shape.

Tables based on the researches of Mr. G. F. Hill, showing the development of forms in Europe, are exhibited on the north pier adjoining the Franks Room.

ORIENTAL SILVER OF EARLY DATE AND TREASURE OF THE OXUS.

Sir A. Wollaston Franks (p. 302) was keenly interested in ancient gold and silver work from the East. He acquired and bequeathed the Treasure of the Oxus, and a number of important silver vessels chiefly from the Iranian area. A few examples had entered the Museum from other sources ; since his death others have been added, the whole series being now exhibited in the Franks Room.

The Treasure of the Oxus was discovered in 1877 in or not far from Kabadian to the north of the river Oxus, and therefore in a region crossed by important lines of communication. Not long afterwards it was purchased by some Bokharan merchants, who brought it to Kabul and thence to Peshawar. It was subsequently bought by General Sir Alexander Cunningham, whose collection was later purchased by Sir Wollaston Franks. Coins included in the find range from darics of the older Persian (Achaemenian) monarchy down to pieces of Euthydemus, Greek king of Bactria. The numismatic evidence thus allows a range of some three

centuries over which the constituents may be distributed, and a high proportion belongs to the earlier part of the period. As might be expected from the neighbourhood of the steppe-country



FIG 133.—Gold armlet once inlaid with blue stones. Fifth century B.C.
(Oxus Treasure, No. 116.)

ranged by nomadic tribes, a few gold ornaments illustrate the Scythic art which spread from Central Asia to Russia.¹

Among the objects of early Persian origin in the treasure may be noted: the splendid gold penannular armlet (fig. 133) with

¹ It is the presence of things illustrating these different cultures which lends the Oxus treasure its peculiar importance. The numbers refer to the Catalogue of the Treasure of the Oxus, published by the Trustees in 1905.

ends terminating in winged gryphons, once inlaid in cloisonné with blue stone (the companion in the Victoria and Albert Museum); the little model of a Persian four-horsed chariot in gold (fig. 134); the chalcedony cylinder (No. 114); the gold and silver statuettes, some representing magi holding the *barsom*, or bundle of sacred twigs used in Zoroastrian ritual; the gold sheath (No. 22), Scythian in form but Persian in its designs; the gold figures of stags (Nos. 11 and 12); the gold fish (No. 16); the silver handle of a vessel in the form of an ibex (No. 10); the shallow gold bowl with lobes

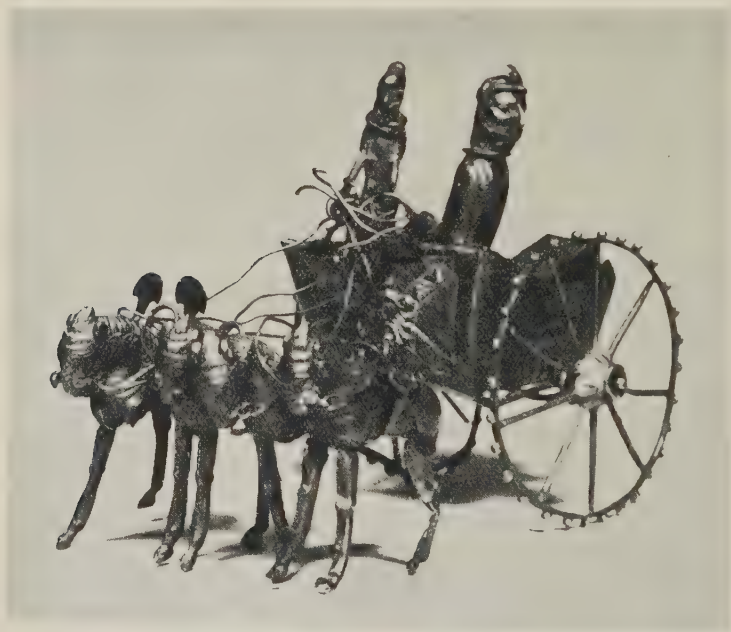


FIG. 134.—Gold model of a Persian chariot. Fifth century B. C.
(Oxus Treasure, No. 7.)

and figures (No. 18); the small shallow silver bowl the ornament of which copies a Greek design (No. 19); various gold rings, some Persepolitan, others influenced by Greek art, but not of Greek workmanship, and mostly with oriental subjects, one (No. 150) bearing the name of a satrap; a number of penannular armlets ending in lions' heads, the shoulders having gold cells for the inlay of turquoise, now mostly lost; a series of rectangular gold plaques with figures punched in outline; and a group of small circular gold plaques with repoussé figures, some for attaching to garments.

The objects in which Scythian influence is found include a gold ornament in the form of a lion-gryphon (No. 23); a gold ring (No. 111) with a beast in a characteristic position, both with cavities for inlay of coloured stones, and a pair of massive armlets (Nos. 144-5) cast and chased with conventionally treated animal forms. There is little in the treasure which can be regarded as purely Greek, but the scaraboid intaglio gem (No. 113) engraved with a combat of two warriors, appears to be Greek work of about 400 B. C.



FIG. 135.—Silver dish, Shahpur II (A. D. 310-80) slaying a deer.
Sassanian Persian.

Other silver objects in the Franks Bequest dating from the Achæmenian (early Persian) period and obtained in the Iranian area were not acquired with the Oxus treasure. These include the fine *rhyton* terminating in the head and forequarters of a gryphon (No. 178), some plain bowls, two scoop-like objects, a dish embossed with a lotus design, and a cylindrical box with fluted sides, all found near Erzingan in Armenia (Nos. 178-86): there is here a resemblance in type to bronze bowls and dishes recently found at Carchemish, and ascribed to the period of the XXVth Egyptian dynasty.

The silver work of the Sassanian (later Persian) monarchy (A. D. 226-651) is well illustrated by fine examples in the Franks Bequest, or subsequently acquired. The dish (Franks Bequest)

with Bahram Gur, the great hunter (d. A. D. 442), slaying lions is a notable example (No. 187) ; a smaller dish (fig. 135) has another hunting scene, with Shahpur II (A. D. 310-80) killing a buck. A shallow bowl with a mounted king and others hunting lions, tigers, boars, and ibexes is said to have been found on the Swat River. On the edge a short inscription punched in letters of the North Western variety of the Brahmi alphabet which is ascribed to the first half of the fourth century. The bowl itself is rather earlier ; the diadem worn by the king suggests that he may be Bahram IV (Varanes, A. D. 380-404). A bust at the bottom of the bowl is treated with floral phœnixes, a relation between Sassanian art and that of India, similar floral phœnixes being found in the decoration of the Ajanta Caves, and the style suggesting an original derivation from Ceylon.

Another bowl of like shape (Franks Bequest) also illustrates the relations between Persia and India. It has round it busts in medallions and foliage closely recalling paintings in the Ajanta Cave No. 1, which are relatively late, dating from between A. D. 500 and the middle of the seventh century. Indian influence also appears in the case of a small, deep bowl in the bottom of which is seen a four-armed goddess. A silver dish with damaged border has ceremonial and banqueting scenes of great interest for Sassanian studies, and in its damaged condition betrays the technical methods of the Persian silversmiths. A vase with a pearly band round the neck, and, on the sides, pearly circles containing birds, has the bottom pierced like a colander, and was probably used for straining wine. Allied to the above examples of Sassanian silver work, but possibly dating from a period after the actual fall of the monarchy, are two other dishes with gilded backgrounds. One shows a personage drinking beneath a tree while musicians play various musical instruments, the other has a bold representation of the Persian bird-tailed dragon so often seen in textile and other art of Sassanian origin.

The embossed work on all the above examples is produced neither by casting nor by beating up the actual body of the dish or other object, but by another method which may have had its home in Mesopotamia. The dish is first hammered out into the desired shape, put upon the lathe and turned, the contours of the figures and other parts of the design are then set out, the figures themselves being separately cut, beaten into relief, and applied by solder to the prepared outlines. Ordinary engraving is sometimes combined with this method of relief, some parts of the same figure being embossed and applied, other parts continuous with these, engraved on the flat surface. This kind of embossing, apparently not practised by the Greeks, seems to be especially characteristic of the Iranian area. It is found, for example, neither in the small silver disks, nor in the Tank dish (*see below*), all of which are

beaten up from the back. The disks, which have embossed subjects, were probably made in Bactria in the third century: two show kings riding on elephants, one depicts the goddess Nanaia, who is often represented upon Bactrian coins. The fine bold bronze figure of a standing lion-gryphon with wings erect is probably a Bactrian version of a Mesopotamian type received by the Greeks from Iranian sources.

Two silver dishes are directly connected by their history with India, though it is probable that one of them was not made in that country. The first, long preserved in the Treasure of the Mirs of Badakshan, and presented by Dr. Lord to the old India Museum in 1838, was transferred to the British Museum in 1900. It illustrates an oriental, perhaps Parthian, conception of a Triumph of Dionysus, and was probably made in the second or third century A.D. The second is embossed with a god drinking wine from a rhyton, and is reminiscent of Greek mythology. It was found near Tank, a town in the Dehra Ismail Khan district of the Punjab, and presented by M. Longworth Dames, Esq., formerly Divisional Judge at Jhelum. It may have been made in northern India in the fifth century of our era.

Oriental metal work of Mohammedan times is now exhibited in the Asiatic Saloon, Department of Ceramics and Ethnography.

OSMUNDS.

This name is derived from an old Swedish word *assmund*, signifying bog-iron, which as early as the thirteenth century was exported from Sweden to foreign countries. The bog-iron ores were collected by farmers and treated in small furnaces, the 'blooms' or masses of malleable iron thus obtained being cut up into pieces and forged into bars of a fixed weight. They passed into use as currency, and in early times farmers in iron districts paid taxes in osmunds at a rate based on the average production of iron in the district. These bars, known in their turn as osmunds, seem to have been made in a peculiar shape, illustrated by the object in Table-Case, Bay XVI, found on the site of the old church at West Blatchington near Brighton. Osmunds were imported into England in great quantities in the fifteenth and sixteenth centuries.

OSTRICH EGG CUPS. See p. 64.

PALIMPSEST BRASSES. See p. 29.

PALL MALL. See p. 101.

PAPAL RINGS. See p. 153.

PATENS. See p. 38.

PAXES.

The pax (*osculatorium*, *tabula pacis*, *paxillum*, *pax borde*, *pax brede*, &c.) was a small panel, generally carved or painted with a sacred subject (e. g. the Crucifixion, Entombment, Trinity, Annunciation, Adoration of the Magi, Baptism, Veronica, or figures of patron saints), and usually made of precious or other metal, ivory, or wood: the last-named material was probably most common



FIG. 136.—Venetian enamelled pax. Sixteenth century.

in poor parishes; in church inventories we find such entries as 'iiij lyttel paxbredes of tre'. It was at one time the usage for the members of the congregation to kiss each other after the Mass, in obedience to the injunction 'Greet one another with a holy kiss'; but at an early date the kiss seems to have been transferred to an object, and when in later times this became the general practice, a flat panel with a handle at the back was finally adopted as the most convenient form; this type was general after the twelfth century. Surviving paxes of earlier date than the fourteenth century are rare; by the fifteenth century they were universal, and, especially in Italy, had become veritable works of art, with enamelled or

nielloed pictures and finely chased frames. The kissing of the pax was one of the occasions on which local questions of precedence became acute. In Chaucer's *Person's Tale* it is said of the proud man, 'eke he waiteth to sit or go above him in the way, or kisse the pax or ben encensed, or gon to offering before his neighbour.' Such jealousies may have contributed to the disuse of these objects.

In England, from the time of Edward VI, paxes belonging to churches were often sold for church expenses, especially those of precious material. Sometimes the more valuable were stolen, a fact of which we are reminded by the words of Pistol in Henry V:

Fortune is Bardolph's foe, and frowns on him;
For he hath stolen a pax, and hanged must a' be.

PENNNERS OR PEN-CASES.

Scribes, clerks, and others were in the habit of carrying their ink-bottle and case with pens, erasing knife, and other accessories attached by cords to their girdles. In France the penner was called either *écritoire* or *galemart*, the latter word being derived from the Latin *calamus* through the Italian *calamaio*. In an inventory of Henry V, the penner and ink-horn (p. 251) are mentioned. The pen-cases were commonly made of *cuir bouilli* (p. 57), and a fine example said to have belonged to Henry VI is in the Victoria and Albert Museum. An ivory box in the collection (Cat. No. 38), exhibited in Table-Case, Bay XX, may have been used as a penner.

PENCILS AND PENS. See p. 251.

PEWTER.

Pewter is an alloy, of which the essential constituent is tin; lead is usually added, but may be replaced by antimony or copper. The tin industry was recognized by royal charters in the thirteenth century, but the ordinances of the London pewterers were first committed to writing in the year 1348: the first charter giving the right of assay was granted by Edward VI in 1473. Pewter below the standard quality could now be confiscated, and marked with the stamp of a broad arrow. In England, outside London, the principal centres of pewter-making were first York and Newcastle; later Exeter, Bideford, Barnstaple, Birmingham, Bewdley, Beverley, and Bristol. In Scotland, Edinburgh and Glasgow were the chief places of manufacture: in Ireland, Dublin and Cork. On the Continent, pewter-making was widely practised in France, and in Germany, where Augsburg and Nuremberg were

the main centres: records show that pewterers were working in these cities in the early part of the fourteenth century. The greatest French pewterer was François Briot (c. 1550), whose work is highly ornamented with medallions and ornaments cast in relief (Tankard in Pier-Case, Bay XVI). His style and even his designs were imitated by the German Caspar Enderlein (d. 1633), and by other Nuremberg craftsmen whose work is illustrated by the plates in Pier-Case, Bay XVI.

Little is known of pewter between the late Roman period and

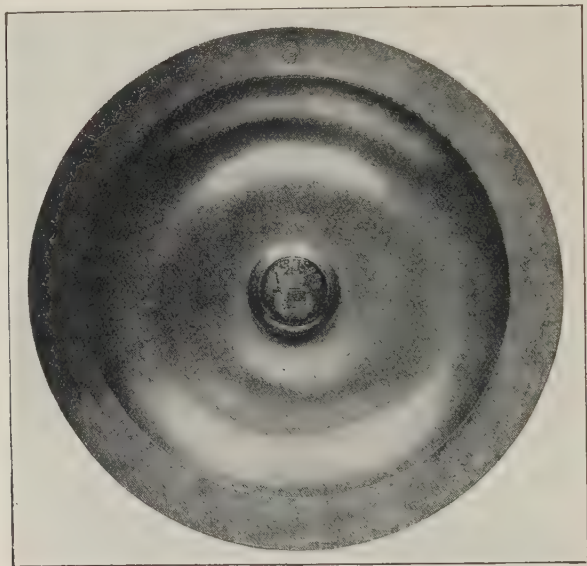


FIG. 137.—Pewter dish with enamelled roundel. Time of Charles I.

the Middle Ages, but from the close of the thirteenth century, and during the century which followed, all great houses had services of pewter, and almost every form of plate is described in inventories. In the fifteenth century it came into more general use, though it was still very expensive and not used for ordinary purposes even by the wealthier classes, and poorer persons continued to use wooden vessels. The set or 'garnish' of pewter for use in a household consisted of twelve dishes, twelve platters, and twelve saucers; if larger plate was required for entertainments, it was hired. It was not until the close of the sixteenth and the first half of the seventeenth century that pewter was plentiful in ordinary homes; allusions are found in Shakespeare to the use of pewter

ware in the household, and to drinking vessels of that material in public houses and inns. It continued in common use until the eighteenth century, when it was gradually displaced by services of glazed earthenware, though in isolated instances and for particular purposes it continued in use down to modern times ; thus for beer-tankards and liquor-measures it is still employed.



FIG. 138.—Pewter dish with figure of Temperance, by Caspar Enderlein.

Though the Council of Westminster in 1175 had ordered that chalices should be of gold or silver, pewter was used for Church vessels in poorer churches in the early Middle Ages ; pewter funeral chalices for burial with priests (fig. 25 and Pier-Case, Bay XVIII) were made from the eleventh down to the fifteenth century. From the close of the sixteenth century flagons of pewter were much used in English churches (example in Pier-Case, Bay XVI) : the earliest with straight sides date from 1602. Plates and alms-dishes were also made of pewter.

There are no series of date-letters upon pewter by which the exact age of any piece can be determined as in the case of silver.

But marks were compulsory from 1503, and by the regulations of the Pewterers' Company each man was bound to have his own 'touch' or mark, which was stamped upon all his work. In London, the Company's quality-mark (the crowned rose), or the special quality-mark (the letter X), was added. Records of all touches are known to have been kept in the Hall of the Company at least from 1540, but the actual records preserved only begin a century later, the earlier plates having been destroyed, possibly during the Great Fire of London (1666). They take the form of five sheets of pewter ('touch-plates') on which a great number of makers' touches were stamped between the years 1640 and 1824; but unfortunately the register of the makers' names has been lost. As the stamps are struck irregularly and not in chronological order, it often happens that the only clues to date, apart from those given by the style of the objects, are furnished by the initials or names accompanying the touches, which are usually pictorial and represent figures such as the mermaid, swan, wheatsheaf, crowned portcullis, or Pegasus. In the seventeenth century the hall-marks for silver were frequently imitated, and when they were used alone without any pewter-marks, the intention was doubtless to deceive the purchaser. The Company imposed a fine on those found guilty of this offence.

Attention may also be drawn to a few salvers and plates, two of the fifteenth century stamped with an ostrich feather and a crown, found at Guy's Hospital, one (fig. 137) having in the centre an enamelled medallion with the arms of Charles I. In the Table-Case, Bay XV, are a number of spoons which follow the form of contemporary silver examples. Among foreign pieces exhibited are a *Temperantia* salver by Enderlein (so called from the figure of Temperance which forms a principal figure in the ornamentation), and several Nuremberg plates and a tankard similarly decorated with cast reliefs.

PHYLACTERIES. *See* p. 97.

PILGRIMS' SIGNS. *See* p. 22.

PINS, NEEDLES, AND NEEDLE-CASES.

Ordinary pins in the Middle Ages were made of bronze, and it is on record that pins were being made in Nuremberg in 1365: in the fourteenth century English pins appear to have been highly esteemed. In the fifteenth century their manufacture had become so extensive that in 1483 their importation was prohibited by law. In 1540 Queen Catherine received pins from France, those of good quality being then made of brass; and from that country the

supply was largely obtained till about 1626, when their manufacture was introduced into Gloucestershire by John Tilsby, Stroud attaining a high reputation in this industry. In 1636 the pinmakers of London formed a corporation, and subsequently the manufacture was established at Bristol and Birmingham, the latter becoming the chief centre. Pins occupying a conspicuous position in ladies' toilets were often of the precious metals, with ornamental heads.

Early examples of the modern style of pin are exhibited in Table-Case, Bay XV.

The most famous centres for the production of needles in the Middle Ages were in earlier times Antioch, Damascus, and Adrianople, and in the sixteenth century, Cordova and Milan. Steel needles were introduced into Europe by the Moors, and there is evidence of their manufacture at Nuremberg in 1370. Drawings by Leonardo da Vinci, one of which is dated 1496, show designs of machines for the making of needles. In England their manufacture was established about 1650. The needle-case was carried by ladies suspended from the girdle. Down to the sixteenth century the needle-case usually consisted of a small, lozenge-shaped case open at the bottom, made to slide up and down upon a cord to the lower end of which were attached several pieces of stuff of the same shape, in which the needles were stuck. When a needle was required the case was pushed up the cord, leaving the pieces of stuff exposed. The case was of wood, metal, crystal (see *Thimbles*, p. 197), ivory, or stiff embroidery, often very richly ornamented. In the sixteenth century a square form superseded the lozenge.

PLAQUETTES.

The name of plaquettes is given to small bas-reliefs in bronze or lead, produced by casting in a mould from a wax model; the finest were made in the north of Italy at the end of the fifteenth and in the first half of the sixteenth century. Their subjects are largely copies from antique gems, from sculpture of the Renaissance, or from engravings; they were made with the object of rendering the work of the sculptors accessible to a wider circle than that of wealthy collectors and patrons. Except where moulds were actually taken from the originals, as in the case of gems, seals, and a few ivory carvings, the reproductions are not slavish copies, but reveal the individuality of the artist. Like engravings, they have different 'states', and the work may be preserved in more than one. The issue of a fine design in the form of a plaquette was really a publication, and the circulation of these small reliefs had a considerable influence upon various branches of art; they were not only directly copied by illuminators, workers in metal, painters

on maiolica, and enamellers, but even artists of the first rank occasionally reproduced them in great sculpture. Thus Donatello, whose own subjects were copied by designers of plaquettes, himself took copies of their work in the medallions which he made for the palace of the Medici. Plaquettes were sometimes kept for their own intrinsic beauty; but their chief use was to decorate caskets, cabinets, inkstands, sword-pommels, and other objects.

Italy was the chief home of these small bronze reliefs at the



FIG. 139.—Plaquette: Hercules and the hydra, by Moderno. Early sixteenth century. (Whitcombe Greene Collection.)

time of the earlier Renaissance. They were principally made in Padua, Verona, Venice, Mantua, Brescia, Parma, Bologna, and Ferrara; their art has all the characteristics of the North Italian style, Tuscan and Roman artists never having produced them in great numbers. Their popularity soon spread into other countries, especially south Germany, France, and the Low Countries.

The best-known artists who made plaquettes were Fra Antonio of Brescia; Andrea Briosco of Padua, styled Riccio (1470-1532); the artist calling himself Ulocrino, whom some have identified with Riccio; Giovanni delle Corniole (c. 1470-c. 1516—so called because he was also an engraver of gems); Caradosso Foppa

(c. 1446-1530); the artists known by the assumed names of Antico and Moderno, the latter belonging to the school of Padua and Venice, and working at the close of the fifteenth and beginning of



FIG. 140.—Plaque by Valerio Belli (Il Vicentino).



FIG. 141.—Plaquettes: in the centre and on the left the Fall of Phaeton, and Hercules and Cacus by Moderno; on the right Music, by Peter Flötner.

the sixteenth century; Valerio Belli of Vicenza (Il Vicentino) (1468-1546); and Giovanni Bernardi di Castelbolognese (1495-1555).

Plaquettes were made north of the Alps from the second half of the fifteenth century onwards. Down to the beginning of the

following century, the subjects were entirely religious. After that time the religious and secular elements continued together until quite a late period; sacred subjects were always more numerous than in Italy. The majority of the plaquettes made on this side of the Alps were produced in south Germany, chiefly at Nuremberg. The French, Flemish, and Dutch artists are unidentified, but in Germany Peter Vischer (1455 or 1487-1528) and Peter Flötner (c. 1493-1546), both of Nuremberg, are well known, the latter being very prolific, and producing much of his work in lead. In Germany secular subjects other than motives derived from classical mythology included moralizing, instructive, and semi-historical series such as the Virtues and Vices, the Liberal arts, the Senses, and the ancient German kings. Engravings by Virgil Solis, Hans Beham, Franz Brun, and others were frequently reproduced. In the Netherlands and in France plaquettes were never made on so extensive a scale.

The series of plaquettes in the British Museum owes almost all its importance to the gift in 1915 by Mr. T. Whitcombe Greene of his notable collection, in which the work of the Italian masters is worthily represented. The plaquettes are at present exhibited, not in the King Edward VII Gallery, but in the Plaquette Room on the first floor of the old building, near the top of the main staircase; it forms the approach to that in which the Coins and Medals are exhibited.

PLATE. See **CUPS, METAL WORK, HALL-MARKS.**

PLATES.

Plates in our sense of the word were hardly known in the Middle Ages. At first trenchers (Fr. *trancoirs*) or slices of bread were used, upon which the portions of meat were placed: on these the guests cut up the food with their knives. Wooden or metal trenchers were however soon made, and for a long time were in existence contemporaneously with those of bread. In the same way they themselves survived long after the introduction of plates made of metal (example of the seventeenth century, in Table-Case, Bay XV).

POISON, TESTS AGAINST.

Various gems and other substances were employed in the Middle Ages as 'proofs' against poison; the gems were supposed to change colour or 'sweat' if it were present. Such proofs were generally possessed by kings and princes, and in some cases used until long after the Renaissance. Perhaps the most popular

proofs were 'unicorn's horns' (which *see*) and 'serpents' tongues', the latter being represented in fact either by the teeth of the fossil ray, or by prehistoric flint arrow-heads. They are mentioned in numerous inventories, including those of Edward I, Edward III, Elizabeth ('adders' tongues'), Jean Duc de Berry, René of Anjou, and others. They were sometimes mounted upon stands placed separately upon the table and known as *lanquiers*.

POMANDERS. *See* p. 143.

PORRINGERS. *See* p. 68.

PORTABLE ALTARS. *See* p. 232.

POSY RINGS. *See* p. 152.

POTTERY. *See Guide to English Pottery and Porcelain*, 3rd edition.

POUCHES. *See* p. 142.

PRESSED HORN.

The art of producing designs by pressing horn, first softened by heat, into a mould, was known in mediæval times; one of the ink-pots in Table-Case, Bay XV, is thus ornamented. But it chiefly flourished in the seventeenth and eighteenth centuries, especially in the earlier part of the eighteenth, when snuff-boxes came into general use. Some of the finest work, however, was produced about a century earlier, examples of which are the medallions with portraits of Frederick Henry, Prince of Orange, and Amelia his wife, by John Osborn, an Englishman working at Amsterdam in 1626. The best-known artist of the eighteenth century who worked in England was John O'Brisset or Obrisset; it is uncertain whether his nationality was French or Irish, but the probability is perhaps in favour of a French origin. His works, many of which may be seen in the collection, range, as the dated examples show, from 1705 to 1727, snuff-boxes forming no inconsiderable proportion of them. Among his subjects were both religious and mythological scenes, but he also excelled in portraits, which were not always those of contemporaries, as the popular bust of Charles I sufficiently proves (fig. 142). This anachronism is perhaps to be explained by supposing Stuart portraits to have been in demand among the Jacobites of Obrisset's day. Another anachronism in the ornamentation of these boxes is the frequent occurrence of the arms and crest of Sir Francis Drake, the popularity of which may have some connexion with the great navigator's share in introducing the use of tobacco into England (fig. 142).

It may be mentioned that the Japanese have long been familiar with the art of pressing horn, and netsukés made in this manner may be seen in Case N in the Asiatic Saloon.



FIG. 142.—Pressed horn boxes, with bust of Charles I and arms of Sir Francis Drake.

PYXES.

A pyx (der. Gr. *πυξίς*, a box of boxwood) was in classical times at first of that material, but afterwards of ivory or other material, in which, as a rule, valuables were kept. When, in Christian times, a receptacle for relics or for the reserved sacrament was required, the classical pyx was adopted, and Christian subjects replaced the pagan figures carved on its sides (examples of Christian and pagan pyxes in ivory in Pier-Case, Bay XX). Ivory pyxes of this kind have been preserved in several Western churches, and were imitated, though in the style of contemporary art, as late as the fourteenth century. But the most usual form of mediæval pyx is a small cylindrical box with a conical top; examples were made in great numbers at Limoges in the thirteenth century (Table-Case, Bay XIX, and fig. 143). Both the pyx and the ciborium were used to contain the reserved sacrament, and there was perhaps no clear line of demarcation before the Romanesque period. After that time the smaller vessel used for the *viaticum* was called a pyx, while the ciborium was a larger vessel always kept in the Church on or near the altar. (See Ciboria).



FIG. 143.—Enamelled pyx. Limoges. Thirteenth century.

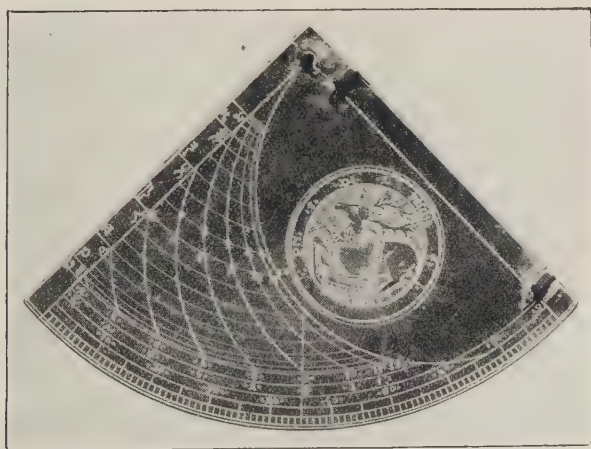


FIG. 144.—Quadrant with badge of Richard II.

QUADRANTS.

The *quadrant*, which is a quarter of a circle divided into 90 degrees, was used for the same purposes as the astrolabe, and is of almost equal antiquity. The arc is marked with the months of the year, and days of the month, above which are the hours and azimuth lines, with part of the Ecliptic and horizon, &c. Fixed to one of the semi-diameters are two brass sights, and to the centre a thread with a plummet. When the sights are brought into line with the object, the position of the plumb-line over the graduated arc shows the altitude. The backs of quadrants were often engraved as dials or nocturnals: the quadrant of Richard II (Table Case, Bay XVI, fig. 144) has a dial on the back.

RIMSTOCKS. *See* p. 32.

RING DIALS. *See* p. 71.

RINGS. *See* p. 147.

ROSARIES.

The method of numbering prayers by telling beads is probably of oriental origin, and is supposed to have been familiar to the Hindus long before the Christian Era. Rosaries are regularly used by Buddhists and Mohammedans, and examples from Japan and China may be seen in the Buddhist Room. The use of the rosary by Christians does not appear to go back to very early times, and there seems to be no certain authority for it before the eleventh century. The name rosary is later still. Rosary *beads* were often of semi-precious stone, or of the precious metals, often chased and enamelled. When of large size they were made to open, disclosing religious scenes; examples minutely carved in boxwood are in the Waddesdon Bequest (Nos. 235, &c.).

ROUNDELS, OR TRENCHERS.

Sets of these thin tablets of beech or sycamore wood were usually kept in boxes. They were inscribed upon one side with rhymed mottoes, posies, maxims, or passages from Scripture, surrounded by floral and conventional designs or enclosing figure-subjects. Though chiefly used in the Elizabethan period, they continued to be made during the first quarter of the seventeenth century. Perhaps fruit or cheese was sometimes placed on the plain side, and the trencher afterwards reversed; there is, however, little



PLATE XII. ELIZABETHAN FRUIT TRENCHERS.

trace of any such use on extant examples. On the other hand the painted surface may have been covered with a napkin on which the fruit was placed. The mottoes were often susceptible of a personal application, and they probably served to amuse the company at table. This twofold use of the roundels is indicated by several passages from contemporary writers. Thus John Heywood in 1598 speaks of 'a thin trim trencher to serve folke at frute', while in Webster's *Northward Ho!* Doll says to Bellamont: 'I'll have you make twelve posies for a dozen of cheese trenchers.' Various sets of these trenchers are in existence in private and public collections. The trenchers were not always round; some are rectangular, and a set of this type is in the Table-Case, Bay XV.

RUSH-LIGHTS. See p. 96.

SALT-CELLARS.

Salt-cellars, commonly called *salts*, were conspicuous pieces of plate in the Middle Ages, the Great Salt serving to separate the part of the table occupied by the principal guests from that assigned to less important persons. In early times they often took fantastic forms, occasionally those of animals; but the examples which have survived fall into four main classes, the earliest dating from the close of the fifteenth century. Those belonging to the oldest class, which was in fashion till the middle of the sixteenth century, are constricted in the middle, and thus approximate to the form of an hour-glass: the fine example at New College, Oxford, dated 1493, has a conical cover terminating in a beautiful finial. In the middle of the sixteenth century salts were cylindrical or square, and the covers were often surmounted by small human figures, as in the case of the Elizabethan salt among the Regalia at the Tower of London: at the close of the century a bell-shaped type came into fashion for a short time, but was soon succeeded by a lower form, either circular or octagonal, expanding at top and bottom, and without a cover. Fine examples of all these types are in the possession of Colleges, Corporations, and City Companies. A Flemish ivory salt with silver-gilt mounts, of the seventeenth century, is in Table-Case, Bay XXI.

The above salts are all ornamental objects, not intended to contain the salt for individual use. For this purpose smaller cellars were made, known as 'trencher salts', and placed near the trencher or plate of the guest. They are triangular, circular, or polygonal: a triangular German example of the sixteenth century is shown in the Waddesdon Bequest Room, Case B (No. 144); two

hexagonal salts in Limoges painted enamel are in the Central Standard-Case ; and another by Léonard Limousin, in the Barwell Bequest, is exhibited in Table-Case, Bay XIX.

SCALES. *See* p. 247.

SCIENTIFIC INSTRUMENTS. *See* pp. 252, 256.

SCISSORS. *See* p. 196.

SEALS. *See* p. 165.

SERGEANTS' RINGS. *See* p. 153.

SHIELDS. *See* p. 15.

SHOE-HORNS. *See* p. 196.

SITULAE. *See* p. 118.

SKATES. *See* p. 27.

SNUFF.

The habit of taking snuff became common in the seventeenth century, and at first it was usual to carry a grater called a *rap* (i. e. a rasp, from the same root as the French *raïper*, to scrape or grate). Apparently snuff-takers used to carry about a roll of tobacco in order to grate small quantities into snuff as required, believing that fresh grating was essential to good quality. The rap terminated at one end in a small spoon, and at the other in a little reserve-box for the snuff, which entered it through an aperture closed by a sliding hatch. Later, the grater and the box were separated, the first being kept at home, the latter alone carried on the person. The finest raps were of carved ivory, usually of French origin and dating from the early part of the eighteenth century. The whole of that century was the great period of the snuff-box, which was often of the most valuable materials and sumptuously decorated. Such boxes were often given as presents by sovereigns, and an example in the Franks Room (Desk-Case) with the portrait of Napoleon I was given by him to the Hon. Mrs. Damer.

SNUFFERS.

Instruments for trimming wicks were in use in ancient times ; snuffers and snuff-dishes are mentioned in the Book of Exodus (xxxvii, 23). Some kind of trimming instrument must have been

in regular use for the large and thick-wicked candles of the Middle Ages, though most of the old snuffers which have been preserved date from the sixteenth century and later. The fine silver pair in the Franks Room, Desk-Case (fig. 145) formerly belonged to

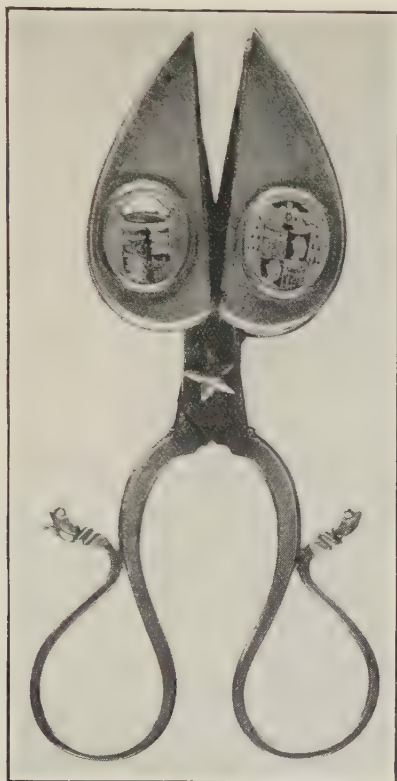


FIG. 145.—Enamelled silver snuffers of Cardinal Bainbridge.

Cardinal Bainbridge, Archbishop of York, who died in Rome in 1514; they bear his arms and the arms of England in enamel. Brass snuffers of the seventeenth century are exhibited in Table-Case, Bay XV.

SOLERETS. *See p. 13.*

SPECTACLES. *See p. 197.*

SPOONS.

Spoons, common in antiquity, and used by the Anglo-Saxons, are not well represented in the later mediaeval period before the fourteenth century; common spoons were doubtless of perishable material such as wood or horn, and these continued in general use until after the Renaissance; though silver spoons were made as early as the twelfth century, they are very rare. At the end of the fourteenth century the inventory of Charles V of France shows that while the king possessed 280 cups of silver and gold, he had only 66 spoons. The first English reference seems to be in a will of 1259, where a dozen silver spoons are mentioned. Probably the early custom was to raise the vessel containing soup or broth directly to the lips; even in the sixteenth century some people preferred to do this, among others Montaigne, who has recorded the fact in his essays. Folding-spoons, carried in *cuir bouilli* cases in the pocket, were used in the fifteenth century (a fine enamelled example (fig. 146) in Table-Case, Bay XV), but seem to have been most numerous a century later, when it was customary for every one to carry about his own spoon and fork.

A considerable number of English spoons have been preserved from mediaeval times. The earliest have a plain knop, an acorn, or diamond-shaped point at the end of the handle. In the fifteenth century the head of the Virgin first appears in this position, and spoons so ornamented are called Maidenhead spoons (example in Table-Case, Bay XV): this type became common in the sixteenth century. Apostle spoons are very rare before 1500, but continued in fashion for a century and a half after this date; they were commonly used as christening presents. A complete set consisted of thirteen—the twelve Apostles, with either Our Lord or St. Paul, each with his attribute: only two such sets are known, one in the possession of the Goldsmiths' Company, the other at Corpus Christi College, Cambridge. Apostle spoons in the old style were still being made about 1650, but the habit of presenting them at christenings was then on the wane, and this may account for their disappearance not long after that time. A type of spoon commonest in the last quarter of the sixteenth and the first quarter of the seventeenth century is that with the baluster and seal-headed end (fig. 147). All these early spoons have the crowned leopard's head stamped within the bowl, which is of the form described as fig-shaped. The baluster-type persisted down to the Restoration, when a new shape came into fashion. Spoons 'slipped in the stalk', i. e. with stems which look as if they had been cut through slantwise by a very sharp blade, are mentioned as early as 1500, but were in especial favour under the Commonwealth, whence they are sometimes described as Puritan spoons.

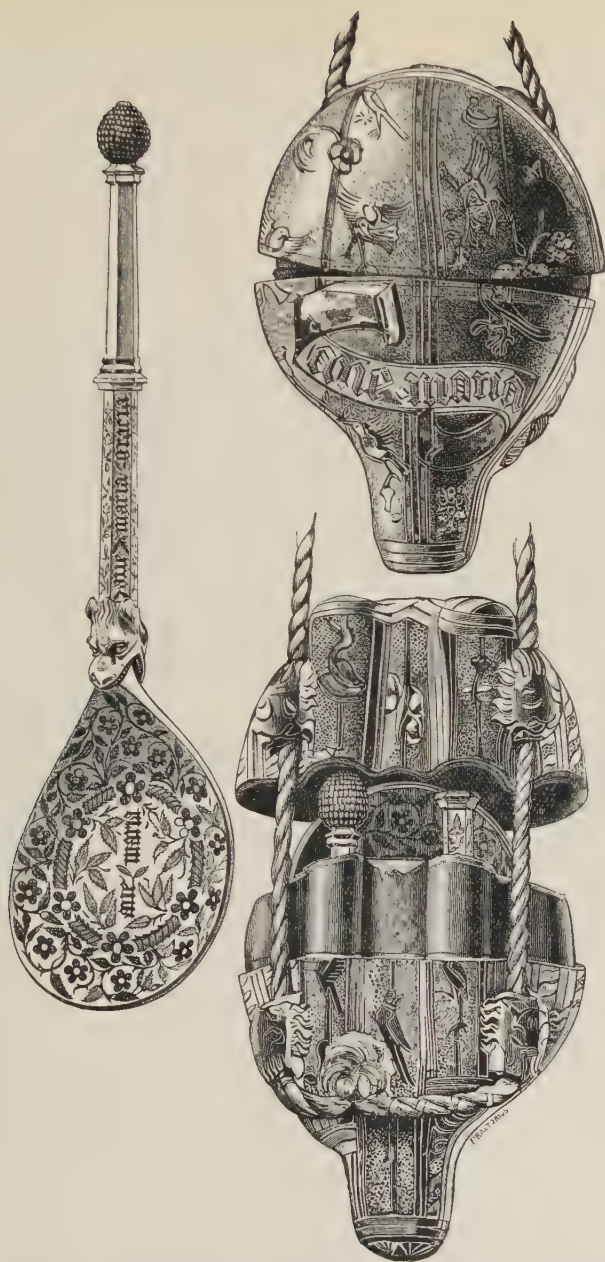


FIG. 146.—Flemish enamelled spoon and case. About 1500.

At the Restoration the handle was made flat and broad, and cut at the end into a form thought to suggest a hind's foot, whence the term *pied de biche* spoons: the bowl was broad oval (fig. 147). The next great change in the form of spoons took place about the reign of George I, when the bowl assumed a narrower elliptical form, while the handle was rounded off and turned up at the end, a rib or median line running down the middle: down the back of the bowl ran a raised tongue, generally described as the 'rat's tail'.



FIG. 147.—English spoons. On the left acorn- and seal-headed; in the middle *pied de biche*; on the right, apostle and maidenhead spoons.

At the end of the reign of George II our present form came into use, with the end of the handle turned down instead of up; the bowl was narrower at the end than at the base, and the 'rat's tail' practically disappeared.

The Scandinavian spoons (Franks Room, Case B) are apparently of a date between the mediaeval period and the third quarter of the seventeenth century. Those with rings were attached to the watch-chain, and were used for draining the dregs of the liquor-bowl passed round at drinking-parties.

The English kings possessed large numbers of valuable spoons. In the 'Jewel Book' of Henry VIII, in the Library of the Society

of Antiquaries of London, there is mention of numerous gold spoons, many enriched with gems and enamels. The 'Coronation spoon' to be seen in the Regalia at the Tower of London deserves special mention. It is of silver-gilt; and though it was at one time thought to have been remade for the Coronation of Charles II, there seems good reason to suppose that it is really as old as the twelfth century; this dating is confirmed by analogies with spoons in the Royal Scottish Museum at Edinburgh, recently found on a monastic site on the Island of Iona. The character of the ornament certainly supports this view; and it has been suggested that it may have originally been the chalice-spoon (*see below*) used at the Coronation of Henry III, for whom new regalia had to be made owing to the loss of the Crown jewels in the Wash. It is in any case a most important example of early English silver-smith's work. About the beginning of the sixteenth century the handles of spoons sometimes terminated in forks of two prongs, probably for picking up sweetmeats (example, Table-Case, Bay XV. and Waddesdon Room, Case B, No. 214).

Spoons of pewter and other base metal were made concurrently with those of silver, and conform to many of their shapes. Attention may be drawn to the examples in the Table-Case, among which may be noted the spoon having at the end a lady's head with a head-dress of the time of Henry V, and that with a wheel at the end used by a cook for cutting pastry. Types of Roman and Anglo-Saxon spoons used in England may be seen in the Room of Roman Britain, Table-Case D, and in the Iron Age Gallery (Table-Case D, sections 2 and 3). In the Ethnographical Gallery are exhibited various spoons of primitive peoples made of such materials as wood, shell, coconut-shell, &c. In connexion with these it may be recalled that the word 'spoon' is derived from the Anglo-Saxon *span*, a chip, the fact confirming the antiquity of the wooden spoon; while the Greek word *κοχλιάριον* and the Latin *cochleare* (hence Fr. *cuiller*) suggest the shell as the spoon of the ancient inhabitants of southern Europe.

Spoons were used in the Church for several purposes. One type pierced like a colander served to strain the wine when poured out of the cruets: an interesting example was found in the Treasure of Traprain (early fifth century) now exhibited in the Royal Scottish Museum at Edinburgh. Another was used to take the wafers for the mass out of the ciborium; a third of small size, to receive the water to be mixed with the wine in the chalice. For incense-spoons *see* p. 36.

STATE SWORDS.

The sword of state as a symbol of power and authority has been continuously associated with the monarchs of England from

the coronation of Æthelred in 978. Since the coronation of Richard I in 1189, three swords in addition to the sword of state have been carried by peers in the coronation procession, the privilege of bearing them being attached to certain earldoms. One of these swords, called the sword of mercy, or *curtana* because its point was blunted, was borne by the representative of the Earldom of Chester until that earldom was merged in the crown on the accession of Edward I. The supreme jurisdiction which

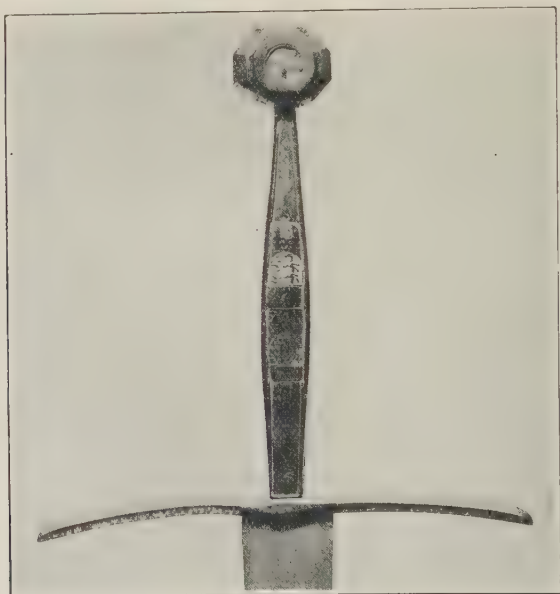


FIG. 148.—Hilt of state sword of Edward Prince of Wales and Earl of Chester. Early fifteenth century.

these swords implied gave the bearers, who were usually of palatine rank, the privilege of having a sword borne before them within the bounds of their own lordships; and the two swords of the Earldom of Chester in Table-Case, Bay XVI, were carried in this way. One of them is of the twelfth or thirteenth century, with a hilt of later date, the other (fig. 148) bears on the hilt the arms, in enamel, of Edward, Prince of Wales and Earl of Chester (1471–83).

The privilege of having swords of state borne before them as emblems of special jurisdiction began to be accorded to mayors of certain cities in the latter half of the fourteenth century. Only seven cities received the right in that century, London being

naturally the first. The extension of the privilege was only gradual, and at the present time thirty-one cities and towns possess the right. The city of Lincoln still has a sword of the fourteenth century, with a Solingen blade.

STEELYARDS. *See p. 247.*

STYLUS. *See p. 251.*

STIRRUPS.

The earliest stirrups were doubtless loops of rope or leather, and the earliest metal stirrups probably imitated the form of the

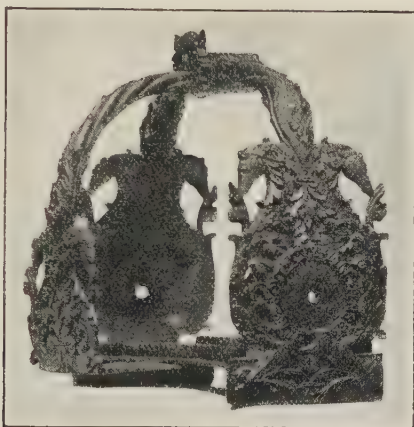


FIG. 149.—Stirrup. Sixteenth century.

flexible loops which had preceded them. The date of their introduction is somewhat uncertain. On the famous Graeco-Scythian silver vase of the fourth century B. C. found at Nicopol in southern Russia something depends from the saddle of a horse which looks like a stirrup-leather, and in Sarmatian graves from the same area metal stirrups have been found. The Greeks and the Romans had no stirrups. They either vaulted on their horses or were aided by mounting-stones such as Caius Gracchus is said to have had placed in the streets of Rome. There is no literary evidence for the use of stirrups in western Europe until about A. D. 600; but the Byzantine Emperor Maurice Tiberius (582–602) mentions iron stirrups in his *Art of War*. The Sassanian Persians were in the habit of using stirrups at a rather earlier date than this, if we

may judge from the style of a Sassanian silver dish in the Museum of the Hermitage at Petrograd, where a mounted hunter is seen using them. Such facts lead to the supposition that they were of Asiatic invention, and the belief is strengthened by the occurrence of metal stirrups of a developed type in the dolmens of Japan, which ceased to be erected in the seventh century of our era; there also appear to be references to stirrups in Chinese literature as early as the close of the fifth century. It is, therefore, a probable hypothesis that they were first brought into Europe out of Asia by mounted Asiatic nomads. Stirrups were used in the first half of the seventh century by the Teutonic peoples who settled in the Roman provinces, for Isidore of Seville, who died in the year 636, makes mention of them. Many early examples have been found in Hungary.

In the early Middle Ages stirrups were never massive, and were often approximately triangular in shape. In the fourteenth and fifteenth centuries the foot-plate and sides grew broader, and one side or both often assumed a curved form at the base. The ornamentation of the sides by openwork also began; but the very elaborate stirrups decorated in this manner chiefly belong to the sixteenth century and later (fig. 149).

SUN-DIALS. *See* p. 69.

SUPER-ALTARS (PORTABLE ALTARS).

The portable altars (*altare viaticum, portatile, gestatorium, &c.*), were usually about 20 inches long and rectangular, intended for use whenever churches were not accessible. After having been consecrated by a bishop, these altars were carried on voyages and campaigns, or on missionary expeditions into barbarous countries. We meet with them at a very early period. One, of wood covered with a thin plate of silver, was found in the tomb of St. Cuthbert, and is now at Durham; Simeon of Durham relates that another small wooden altar was found in the tomb of St. Acca, Bishop of Hexham, upon the breast of the Saint. The Venerable Bede (675-735) mentions that two missionaries to the Saxons carried such an altar with them in 692 (*tabulam altaris vice dedicatam*). St. Wolfram, Bishop of Sens, is said to have taken one with him on a sea voyage; and William the Conqueror found a magnificent example among the treasures of Harold, which he presented to Battle Abbey. In the Middle Ages the privilege of possessing a portable altar was granted by the Popes to individuals or communities: thus Martin V granted the privilege to the English Merchants of the Staple at Calais. Most of the ancient portable altars have been destroyed, and probably less than fifty are now



PLATE XIII. PORTABLE ALTAR, THIRTEENTH CENTURY.

preserved, the greater number in the treasuries of Rhenish churches. The early examples were no doubt comparatively plain, but from the end of the tenth century they became more elaborate. The central part on which the chalice was placed was a slab of marble, porphyry, jasper, or other fine stone, usually rectangular. This was framed in a thick panel of wood, often of a rare kind such as cypress or ebony, which itself was commonly covered with plates of metal, often engraved or embossed, and often enriched with enamel, niello, and gems. Beneath the stone was a place for relics of saints, the thickness of the altar varying from about an inch and a half to several inches. Dr. Rock considered that a distinction should be drawn between the ordinary portable altar and the more sumptuous examples with four feet, to which he confined the name super-altar. This was placed upon already-consecrated altars in great churches as a mark of additional reverence and as an honour to the celebrating bishop or prelate. Well-known examples are the tenth-century altar of St. Andrew in the cathedral at Trèves, and those made by Roger of Helmershausen at Paderborn. The fine portable altar in Pier-Case, Bay XVIII (plate XIII), was a gift from an abbot named Thidericus (Theodoric), probably to the Abbey of Scheida near Cologne, in the thirteenth century.

SURCOATS. *See* p. 14.

TABLES. *See* **GAMES**, p. 100.

TALISMANS. *See* p. 161.

TALLY-STICKS.

These sticks are of willow, box, or other seasoned wood, squared or flattened with a knife, and rent into two parts. A tally-stick (Lat. *talea*, a stake) served as a register of accounts or as a receipt, and when it was used, the sum of money representing the transaction was cut upon both parts by means of notches, in such a way that if the two were put together each notch upon the one tallied exactly with the corresponding notch upon the other. Each of the higher denominations (e. g. pounds) was indicated by deep notches upon one surface; each of the lower denominations (shillings and pence) by smaller notches upon the opposite surface: the stick was usually rather flat than square, and the narrower surfaces or edges received the notches, while on the two broader faces the nature of the transaction was described in ink. One of the two parts was larger than the other, having a handle or undivided base, and was called the stalk or counterfoil. The smaller

was known as the leaf, or foil. The way in which the two parts fitted together is shown in fig. 150.

This simple method of keeping accounts or giving receipts was of great importance in an age when writing was not a universal accomplishment; for it was easy even for the illiterate to verify the number of notches by simple enumeration, and see whether they coincided. It has been employed down to our own time in hop-gardens and elsewhere, both in England and abroad; and though very primitive, is not without practical advantages. As long as the two notched halves remain apart, the two parties to the contract are still debtor and creditor; the union of the two in the hands of one party means that the account is closed and receipted. Tally-sticks were used by the British Exchequer down to the nineteenth century; but comparatively few of the large

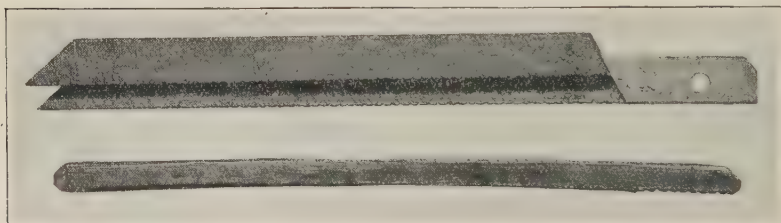


FIG. 150.—Above, modern hop-tally, as used in Kent; below, tally of the fourteenth century.

numbers once stored in the old Houses of Parliament escaped from the fire in which the building was destroyed in 1834. In transactions between the Exchequer and individuals the latter were given the 'stalk', while the 'leaf' (foil) remained in official custody; as in modern payments by cheque, the payer retains the counterfoil. Fig. 150 includes a stalk held by Radulph Spigurnell, Constable of Dover Castle and Warden of the Cinque Ports, dated October 7, 1368.

The ancient tallies, such as those of the thirteenth, fourteenth, and fifteenth centuries exhibited in Table-Case, Bay XVI, were commonly of small size because the value of money was high. When the value of money diminished, sticks of greater length were required; the purchasing power of a pound being less, more pounds were required in every transaction, and more notches upon the stick. The common use of tallies in the ordinary business of life is illustrated by literary references: Shakespeare uses them for a simile in his hundred and twenty-second sonnet.

Private tallies of early date are rare: the Museum possesses one of the middle of the thirteenth century, relating to the delivery of

a quantity of malt (Table-Case, Bay XVI), and an interesting example of 1367-8, recording a payment by the reeve to the Lord of the Manor of Appleby Parva, in Leicestershire, is preserved, with the roll of the reeve's accounts, at that place.

TANKARDS. *See* p. 67.

TAU-CROSSES.

The word Tau is derived from the name of the Greek letter T which resembles a cross without the upper limb. The tau-cross was a staff with a top of this form, made of various materials, sometimes of carved ivory. Episcopal staves were often of this shape down to the twelfth century, as they still are in the Greek Church, and they were used concurrently with the crook or crozier. In later times the tau was regarded as the distinctive staff of abbots. Cantors and precentors also carried staves, which are thought to have been sometimes taus, though they are generally described as having a pommel at the top.

Attention may be drawn to the beautiful carved ivory head of a tau-cross in the collection (Table-Case, Bay XXI, plate VII), found at Alcester in 1903 and perhaps made for the Abbey of Evesham; other examples are in the Victoria and Albert Museum. The tau as the symbol of St. Anthony represents the top of a staff, regarded as that of a pilgrim or hermit. Here, as in other instances of its use, the form was adopted not for convenience alone but from its resemblance to that of the Greek letter T, which had been admitted as a type of the Cross as early as the second century.

TEXTILES AND NEEDLEWORK.

The large national collection of ancient textiles is in the Victoria and Albert Museum, where fine mediaeval examples will be found. The British Museum has, however, a few pieces of great interest, some exhibited in a frame on the south pier adjoining the Franks Room. They include figured silks from the robe and mitre-shaped head-dress of the Emperor Henry VI (d. 1197), discovered when his sarcophagus in the Cathedral of Palermo was opened towards the close of the eighteenth century; some beautiful fragments of embroidered vestments from the tomb of Walter de Cantelupe, Bishop of Worcester, 1236-65; and a few smaller fragments from that of Bishop Hotham of Ely, 1319-37. In the design upon the garments of the Emperor we clearly see the Oriental influence which affected the earliest products of the loom in mediaeval Europe, especially in Sicily, where Saracenic art was highly developed and Byzantine weavers were introduced by the Norman

princes; but before, and during Romanesque times fine textiles, chiefly silk, were imported into the West from the Byzantine Empire and the East. The scrolls on the vestments of Walter de Cantelupe may be compared with those on the tiles from Chertsey Abbey, which are of the same period.

Attention may be drawn to two panels of English embroidery (*opus anglicanum*) shown in frames on the pier, Bay XVII,



FIG. 151.—Panel of English needlework (*Opus Anglicanum*). About 1300.

the upper of the late thirteenth, the lower of the fourteenth, century. There is evidence that at the time of the Conquest English embroidery already enjoyed high repute. Matilda, the Queen of William the Conqueror, bequeathed a tunic worked at Winchester and a mantle embroidered with gold; and William of Poitiers, royal chaplain, describing the Conqueror's gifts to churches and monasteries on the Continent, says: 'the women of England are very skilful with the needle and in the matter of tissues of gold.' From about the middle of the thirteenth century the term *opus anglicanum* was generally applied to it. Matthew Paris records that in 1246 Pope Innocent IV seeing in Rome

English ecclesiastics wearing fine robes embroidered in gold, asked where these had been made. On being informed, he sent letters to the Cistercian abbots in England, ordering supplies for papal vestments. The cope from the Monastery of Syon, near Isleworth, now in the Victoria and Albert Museum, is a magnificent specimen of this work, which was highly valued on the Continent. Fine examples are to be seen in Italy, France, and Spain, a beautiful cope being in the Cathedral of Toledo.

In Central Table-Case 2 are shown some fragments of early mediaeval figured silk, used as bags for seals, with embroidered purses and other objects of the seventeenth and eighteenth centuries.

THIMBLES. *See* p. 197.

TOBACCO-BOXES, PIPES, AND STOPPERS.

Tobacco was first brought to Europe by the Spaniards about the year 1560. It was introduced into France in 1561 by Jean Nicot,

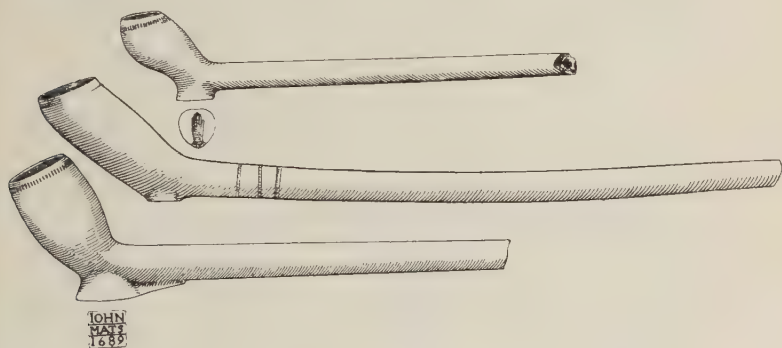


FIG. 152.—Clay tobacco-pipes. Seventeenth century.

French Ambassador at Lisbon, after whom it was called *Nicotiana*: the name was subsequently corrupted into *Nicotine*, the word now used for the essential oil of the plant, but the Spanish *tabaco*, a version of a native word, was ultimately adopted, with modifications, in all the languages of Europe. It is uncertain who really introduced tobacco-smoking into England, though Sir Walter Raleigh is traditionally credited with the achievement; at any rate by 1598 it was a common custom. In consequence of its vogue in England the smoking of tobacco became general in Europe, the habit persisting in the face of opposition from statesmen, priests, and monarchs, penalties sometimes being imposed on those who indulged in it. Clay pipes are men-

tioned in that year, the bowls being very small, probably because the tobacco was exceedingly costly; it was not until the



FIG. 153.—Brass tobacco-box of the eighteenth century, with portrait of Frederick the Great.



FIG. 154.—Tobacco-stoppers. Seventeenth and eighteenth centuries.

end of the seventeenth century that the size of the bowls became larger. The examples which, on account of their small size,

are presumably most ancient, are without dates, though some are stamped with initials or marks. Fig. 152 shows types of early clay tobacco-pipes, which are frequently dug up in London and in other towns, and have sometimes, on account of their small size, been called 'fairies' pipes'. Amesbury in Wiltshire and Broseley in Shropshire were both early centres of manufacture.

The oblong brass *tobacco-boxes*, of which such numbers exist in this country, were first introduced from Holland about the time of William and Mary, and many of them are engraved with scriptural and other subjects with inscriptions in Dutch. Later in the eighteenth century they were made in England, and commonly ornamented with embossed subjects, portraits of the popular hero Frederick the Great being especially numerous (examples in Central Table-Case 2, fig. 153). *Tobacco-stoppers* of the seventeenth and eighteenth centuries with human figures at their butts, generally either carved in wood or cast in brass, have been preserved in considerable numbers (fig. 154); they were sometimes combined with finger-rings, in much the same manner as the private keys of the Romans.

TRENCHERS. See p. 218.

UNICORN'S HORN.

The horn ascribed in mediaeval times to the unicorn of fable was really the long tusk projecting from the upper jaw of the narwhal, which from this peculiarity has sometimes been called the 'sea-unicorn'. It was specially valued as one of the 'proofs' to detect the presence of poison, fragments of it being cut off to be used after the manner of the other 'proofs' (p. 219). Lorenzo the Magnificent (d. 1492) possessed: *uno corno d'unichorno*. Pendants with pieces are mentioned in many inventories of the late fourteenth and of the fifteenth century. In the inventory of Henry VI the purpose of the object is stated: 'to be put in our drink'. The belief lasted on until the seventeenth century. Henry VII had 'a unicorn's bone' and a 'serpent's tongue on a chain, which passed into the possession of Henry VIII; and Mary Queen of Scots had a segment set in a jewel. Webbe in his *Travailes*, published in 1590, says: 'These unicornes when they come to drinke of any river, they put in their horne, and forth of that water will rise a great skum and thereby clense all the filth and corruption that is within the same, and this horne grated to powder is a present remedie against all maner of poyson.' But about this time scepticism began to be expressed. In the inventory of the regalia of James I (1604) what was presumably a narwhal's tusk is described as 'esteemed for unicorne's Horne'.

UTENSILS, DOMESTIC.

Mediaeval domestic utensils deserve further investigation than they usually receive, but they are much scattered, and even those made of metal have only survived in comparatively small numbers. To these the following brief remarks must be confined, the reader being referred for fictile vessels to the *Guide to English Pottery and Porcelain*, 3rd ed., 1923; a number of objects of common use are treated in special sections in this volume. In Alexander Neckam's *De utensilibus*, dating from the end of the



FIG. 155.—Bronze skillets: that on the right, seventeenth century; that on the left of earthenware.

twelfth century, a description of the contents of a kitchen will be found; the names of various vessels are mentioned by Jean de Garlande who wrote about 1300; while further information is furnished by wills, accounts, and other documents. From such sources and from representations in art we may gather that mortars, cauldrons, large metal spoons, gridirons, basins, and pans of various kinds were in constant requisition, and that many were made of iron. Few of the utensils in the collection go back to the early periods, but the tripod cauldrons (example in Pier-Case, Bay XVII) and skillets (fig. 155) deserve notice; the seventeenth-century skillets (Pier-Case, Bay XVI, E, and fig. 155) are probably survivals of earlier types.

Most metal vessels are described as made of *latten* (Fr. *laiton*), an alloy of copper and zinc, not copper and tin, and therefore strictly a brass; but there can be little doubt that the term *latten* was

loosely used, and that a very large proportion of the objects so described were composed of copper and tin, and were therefore of a true bronze. The ewers, basins, jugs, mortars, purse-frames, and other objects commonly made in this metal were doubtless produced in every country, and most of them did not require any great capacity in the maker. But several very fine pieces of work



FIG. 156.—Large English bronze jug. Time of Richard II. Found in Kumasi.

which have survived the common destruction show that men as skilful as the bell-founders turned their attention to domestic vessels. An example of this is the great English bronze jug with inscriptions and badges in relief, exhibited in Pier-Case, Bay XVI, E (fig. 156). This jug, which dates from the time of Richard II, somehow or other found its way to the Kingdom of Ashanti, on the Gold Coast, where it was discovered during the British Expedition of 1896. The type of vessel on three feet, with spout and handle, of which examples are shown in the same case, Bay XVII, was

a popular mediaeval form ; a seal of Sandre of Gloucester (Table-Case, Bay XVIII), dating from the latter part of the thirteenth century, shows such a pot ; and there exist other examples of the same period or a little later bearing coats of arms and raised inscriptions with the owners' names, or with the words *venez laver*. The latter inscription shows that one use of these vessels was for washing the hands, a supposition confirmed by a miniature of the *Roman de la Rose* in the library at Brussels, where a man is seen



FIG. 157.—Bronze ewer in form of a mounted man.
Fourteenth century.

drying his hands near a basin, while a tripod ewer hangs from a hook above. Ewers uniformly paired with basins for use at table were not general until the beginning of the seventeenth century, when they were introduced from Italy. They were brought round after every course, and water, often scented, especially in and after the fourteenth century, was poured over the guests' hands. They continued to be made after the introduction of forks, but were no longer so essential. Examples are mentioned in inventories from as early as the thirteenth century, but most of those which exist are of the sixteenth and seventeenth centuries. The characteristic mediaeval bronze *aquamaniles* (fig. 118) were employed, as their

name implies, for the same purpose, as were also the Romanesque bronze bowls (p. 187) engraved with figure-subjects, but the ewer and basin were not closely matched; the *aquamaniles* were made in the shape of animals, chiefly lions, or equestrian figures (figs. 119 and 157), and are always conspicuous in collections of early metal work. They chiefly belong to the thirteenth and fourteenth centuries, and the equestrian type was sometimes reproduced in contemporary pottery (Bay X, Section D, B, 86). The enamelled gemellions (Table-Case, Bay XIX) and sometimes the bronze tripod ewers served the same purpose. The gemellions (der. from the same root as *jumelles*, twins, because they were used in pairs)



FIG. 158.—Bronze mortars. Sixteenth and seventeenth centuries.

were made at Limoges in the latter half of the thirteenth century, as may be gathered from the coats of arms which occur upon them and from the character of their ornaments. A few have sacred subjects, but the majority secular designs, though both classes seem occasionally to have been used for washing priests' hands. Perhaps most gemellions were used at meals in the hall or refectory, the water being poured out of the spouted bowl, while the other was held beneath the guest's hands to receive it. These rather awkward double basins were ultimately superseded by the more convenient combination of ewer and basin. They are mentioned in many English inventories and wills from the time of Edward I onward. The silver ewers and basins in the collection are almost all of German work and are in the Waddesdon and Franks Rooms.

By the beginning of the fifteenth century, Dinant, near Liège, in Belgium, had become so famous for its work in latten that the word *dinanderie* was generally used to express the products of its industry. Perhaps the occurrence of zinc round Liège led the founders of the Meuse to adopt brass instead of bronze for ordinary use, and Dinant and the neighbouring town of Bouvignes had been rivals in working metal from the thirteenth century. The *dinanderie* of the Low Countries was freely exported to other kingdoms, and after the destruction of Dinant by Philippe le Bon in 1466 many workmen emigrated, some of them coming over to England. The industry was not confined to one region, and in the fifteenth century other towns in Belgium, France, and Germany had attained celebrity. Bas-reliefs, statuettes, candlesticks, &c., were now made in great numbers, and the production continued during the next century. Bronze mortars, judging from the evidence of inventories, must have been in use in almost every household in the Middle Ages, and they appear in wills as bequests; perhaps the finest mediaeval specimen extant, with the maker's name, and dated 1308, is in the museum at York. Examples dating from the sixteenth century are exhibited in Pier-Cases, Bays XVI, F, and XVII, A). Mortars were used in the kitchen, as may be seen from representations in pictures, for instance Velazquez' 'Christ in the house of Martha' in the National Gallery.

VERVELS. See p. 98.

WAFERING-IRONS.

These were used throughout the Middle Ages for making thin cakes baked in the irons upon the embers. They took the form of two disks, incised or stamped with figure-subjects, heraldic and personal devices, sometimes with merchants' marks or conventional ornament, and often inscribed, the disks being hinged together and each having a long handle; the cake, pressed between the disks, received the designs on both sides. Their use has continued down to modern times, and they served to make the cakes baked on 'Mothering Sunday' (at Mid-Lent), which are considered to be survivals of the offerings made in pre-Reformation times on the altar of the Mother Church upon that day. The sacred devices upon some ancient examples imply use for other than secular purposes. A fine pair of irons of the second half of the thirteenth century, with religious subjects and inscriptions, in the Musée de Cluny, Paris, and a pair in the Episcopal Museum at Vich in Catalonia, were used for making the Host; and in Feckenham Church, Worcestershire, is a sixteenth-century pair used in

the same way. A large pair (Umbrian, c. 1500) with the lion of St. Mark and the arms of a Venetian family is exhibited in Pier-Case, Bay XVI, D.

WAGER (WEDDING)-CUPS. *See* p. 66.

WALKING-STICKS. *See* p. 198.

WATCHES. *See* **CLOCKS.**

WAX PORTRAITS, MODELS, AND MASKS.

The art of modelling in wax was well known in antiquity; it was practised in Egypt, Greece, and Rome, and the masks of dead



FIG. 159.—Wax portrait. German. Sixteenth century.



FIG. 160.—Wax portrait. German (Nuremberg). 1596.

ancestors which the Roman patrician kept in his house were of this material. The art was in fact for many centuries concerned with the production of effigies of the dead, intended to be carried in their funeral processions. This custom was in existence in mediæval Europe, continuing even after the Renaissance; and though the funeral effigies of royal personages preserved at Westminster are of other materials, that of Henry III, which has not survived, is recorded to have been made of wax. Effigies were made of the French kings, the last so represented being Henri IV. In our own country the last king on whose bier an effigy was carried was James I.

Sculpture in wax became a fine art in Florence in the second half of the fifteenth century, and in the following three centuries

a number of artists were engaged in the production of portraits, not only in Italy, but in France, Germany, and other countries. The best known of the earlier Italian modellers was the Florentine Orsino (1432-88); other Italian names are Lombardi of Ferrara, Sozzino of Siena, and Abondio, who worked in Florence. A wax model for a medal of Michelangelo by Leone Leoni is exhibited in the Franks Room. In England, very fine portraits in wax on a small scale were executed by Abraham Simon (1622?-92?), brother of Thomas Simon (1623?-65), engraver to the Mint. A series of these, including a self-portrait, came into the Museum with Sir Hans Sloane's Collection; they are full of vigour and character. In France the best artists in wax in the sixteenth century were



FIG. 161.—Wax portraits by Abraham Simon. Seventeenth century.

François Clouet, who made the funeral effigies of the royal family, and the Danfries, father and son. In the reign of Louis XIV Antoine Benoist (1632-1717) was the great portrait-artist: he was invited to England by James II, where he executed many portraits. In Germany, where the wax portrait became the rival of the wood or honestone medallion in popularity, Lorenz Strauch and Wenceslas Müller of Nuremberg were well-known portrait-modellers. It is impossible to mention all the later artists in various countries, but it may be noted that Flaxman modelled his famous medallions for Wedgwood in wax (examples in the Falccke Collection, Department of Ceramics). In the eighteenth century the material was very frequently used for small reliefs on snuff-boxes and other articles, but in the nineteenth its popularity declined.

The above paragraphs refer to completed works of art; but wax has constantly been used by sculptors, medallists, and jewelers for making their models. Among the greater names of those who worked in this way may be mentioned Michelangelo, Verrocchio, Luca della Robbia, and Benvenuto Cellini. Several of Michelangelo's small models are to be seen at South Kensington, and one is in the Museum Collection (Pier-Case, Bay XV).

Mention may here be made of wax figures which can seldom claim any artistic merit, the *ex voto* which have been produced from very early times both in human and other forms, and the figures used in magic. The latter were rude representations of people whom it was desired to injure: they were stuck full of pins or gradually melted before the fire, in the belief that the persons whom they represented would in like manner be wounded and pine away. This practice, which in France has always been known as *envoûtement* (base Latin *involtare*, *invultare*, from *in* and *vultus*, a face), was well known in antiquity, and is mentioned, for example, by Plato. There is abundant evidence of its frequency through the Middle Ages and the sixteenth and seventeenth centuries, even great personages living in fear of it; the discovery of such a figure of Queen Elizabeth in Lincoln's Inn Fields led to the summoning in consultation of Dr. Dee. In our own day it is still obscurely carried on, while it has numerous analogues among the superstitions of savage peoples.

Besides the portraits temporarily exhibited in the Plaque Room, Wall-Case 25, those interested should see the series in the Wallace Collection at Hertford House and in the Musée de Cluny in Paris. Other series are to be seen at Vienna and Nuremberg.

WEIGHTS AND MEASURES.

In the Middle Ages objects were weighed both upon steelyards and upon ordinary scales, the latter being levers with a central fulcrum and equal arms, from the ends of which pans are suspended by chains. It is obvious that in scales of this kind the weights used must be equal to the weight of the merchandise; there must therefore be several of them, and they must vary in size. In the case of the steelyard, a lever with unequal arms, which was in common use among the Romans, a single counterpoise, sliding along the graduated longer arm, suffices to balance objects of various weights suspended from the shorter arm (examples in Room of Greek and Roman Life, Wall-Cases, 41-4, and in Room of Roman Britain, Table-Case A).

The basis of the old English weights and measures was the grain of corn, a given number of grains being equivalent to the penny sterling. In the reign of Henry VII it was enacted that the bushel should contain eight gallons of wheat, the gallon eight

pounds, the pound twelve ounces Troy, the ounce twenty pennies sterling, the penny sterling 32 grains of dry wheat taken from the midst of the ear 'according to the old laws of this land'. This ratio of 32 grains to the penny had been established from Saxon times, the 32 wheat-grains being equivalent to 24 barley-corns, which are the grains of Troy measure, and had been used as a unit instead of wheat-grains in parts of the Roman Empire. Avoirdupois weights were of more recent introduction than Troy, and were used for heavier objects from the time of Henry VIII. Standard vessels for measures of capacity were made by order of King Edgar and deposited at Winchester, whence the name Winchester measure. In Pier-Case, Bay XVII, C may be seen



FIG. 162.—French pound and half-pound weights. Thirteenth to seventeenth centuries.

a bushel of the time of Queen Elizabeth: other early bushels are in the Science collections at South Kensington. The old standard weights which all cities and towns were bound to keep have nearly all been lost on the frequent occasion of renewal; but Lancaster has a set dating from the time of Henry VII, and other early weights are at Derby and Cambridge. Of the English weights exhibited in Table-Case, Bay XVIII the heavy spherical examples with shields of arms in relief are as early as the thirteenth century, and were probably counterpoises for steel-yards: a smaller weight in the shape of a human head is also a counterpoise, somewhat recalling the weights in the shape of heads and busts used by the Romans. The flat weights with the royal arms were for ordinary scales, among the earliest being a lead example of Edward I: the larger flat bronze weights of half a stone belong to the Stuart and Georgian periods. The sets of avoirdupois weights fitting into each other like nests of boxes are not earlier than the sixteenth century. The small steelyard is probably of the seventeenth century.

The weights in Table-Case, Bay XVI are of foreign origin. The most interesting are those from the old provinces of Languedoc and Guienne in the south of France, which are flat and circular, with devices and legends on both sides, so that they have sometimes been called monetiform (fig. 162). They were locally known as *livrals* or *pesons*, and are pounds, half-pounds, and quarter-pounds, the earliest dating from the thirteenth century. The subjects upon the field are symbols, attributes, and heraldic devices indicating the authorities exercising jurisdiction in the provincial towns. There were sometimes more than one of these, secular (royal, baronial, or municipal) and ecclesiastical (episcopal or abbatial), in which case the weights of the place bear their several devices. There was no uniform standard in mediaeval France, princes and barons having power to modify weights within their own territory at their pleasure. The pound was in use everywhere, but it contained a different number of ounces in different places. Uniformity was not attained until the adoption of the metric system at the time of the French Revolution. Attention may also be drawn to the set of brass *avoirdupois* weights in a *cuir bouilli* case (Table-Case, Bay XVIII), and to the wooden boxes containing small scales and sets of weights commonly used by money-changers in the seventeenth and eighteenth centuries (Table-Case, Bay XVII). It may be noted in conclusion that though ancient weights exist in considerable numbers, mediaeval scales are of great rarity; they are represented on reliefs of the twelfth century at St. Gilles and Beaucaire in France, in the legendary scene of the Marys buying perfumes on the morning of the Resurrection, to embalm the body of Our Lord; and they are conspicuous in the *psychostasis*, or weighing of souls by St. Michael at the Last Judgement, a frequent subject in mediaeval art. The figure of St. Michael with the scales was used by the Plumbers' Company of London to mark lead and solder until comparatively modern times. The pagan custom of interring personal property with the dead has had the result of preserving more examples of the Roman and Saxon periods than of the mediaeval centuries.

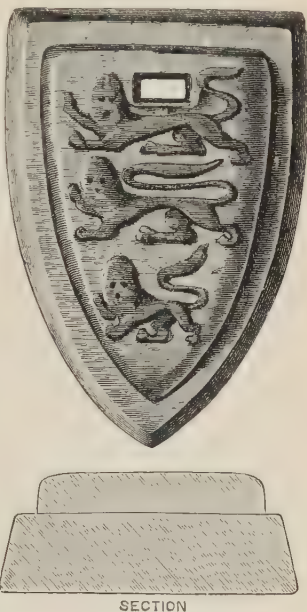


FIG. 163.—Bronze weight of four ounces. Fourteenth century.

WOODEN VESSELS.

Gold and silver plate being found during the Middle Ages only in the houses of wealthy persons, the vessels in common domestic use were mostly of wood. In the *Description of England*, prefixed to Holinshed's *Chronicles* (1586), mention is made of the exchange of 'treene [wooden] platters into pewter and wooden spones into silver or tin', and it is stated that in old times all sorts of 'treen' stuff were so common that a man would hardly find four pieces of pewter in a good farmer's house. The play, *Philocothonista*, by Thomas Heywood (1635), contains the passage: 'Of drinking cups divers and sundry sorts we have: some of elme, some of box, some of maple, some of holly, &c. Mazers, broad-mouth'd dishes, noggins, whiskins, piggins, crinzes, ale-bowls, wassell-bowls, court-dishes, tankards, kannes, from a pottle to a pint, from a pint to a gill. . . .'

In addition to the mazers (p. 173) and trenchers (p. 218) the collection contains characteristic types of wooden vessels. The quadrangular *methers* (mead-cups), from six to twelve inches in height, with looped handle seem to have been made in Ireland at a very early period; the fine oak cup with silver mounts, inscription, and date 1493, preserved in Dunvegan Castle in the Island of Skye, is essentially of this type. In the Franks Room, Case A, are exhibited three wooden standing cups with covers of the seventeenth century, with engraved ornament of animals, shields of arms, and inscriptions, one having the arms of James II; cups of this form were made quite early in the century, and the type was reproduced in gold and silver. To the early seventeenth century also belongs the Boscobel Cup with silver mounts; in the same case are small German wooden cups of the seventeenth century, and a Swiss wooden cup representing a peasant with hod and staff, of the sixteenth century. This type was common in Germany and Switzerland, and recalls the silver cups of fantastic human and animal forms (p. 66) made in great numbers during that century in Germany (examples in the Franks and Waddesdon Bequests).

WRITING.

Though ink was used throughout the Middle Ages, as at an earlier period, and paper, first introduced into Europe by the Arabs, was in fairly general use in the second half of the fourteenth century, tablets with a coating of wax were still found convenient for accounts and short memoranda: such tablets, commonly made of wood, had of course been in use in classical times. Adamnan in the late seventh century specially mentions that he took down Arculf's account of his visit to the Holy

Places on his wax tablets. Though often having only two waxed surfaces on the inner sides of the two covers, mediaeval tablets were sometimes provided with several leaves: and a fine example of this kind, with eight leaves and in a *cuir-bouilli* case, is preserved in the Museum of Namur. The instrument used for writing was a sharp stylus (*greffe* or *pointel*) of metal, ivory, or bone, the bone and ivory examples being often finely carved at the thicker end (see Bay XXI, Table-Case, fig. 164). None of the carved ivory writing-tablets in the same Table-Case have preserved their coating of wax, but the wooden tablet in Pier-Case, Bay XV, said to have been obtained in Switzerland, is also engraved with writing of the fifteenth century. The Department of MSS. possesses a tablet of accounts of about the year 1300 from the Abbey of Citeaux, while in the National Library at Paris there are tablets of the fourteenth century from Beauvais; other examples are preserved in Germany and Italy. Wax tablets were used until comparatively recently in the fish-market at Rouen, and examples of these with the metal styli which accompanied them are preserved in the *École des Chartes* at Paris.

For writing on parchment and paper pens were used, but their perishable material (reed or quill) has naturally led to their destruction. Quill pens appear to have been first mentioned in the seventh century, and by the ninth century they were in very general use, though reed pens were not altogether abandoned; it may be noted that the split pen was used by the Romans: a metal example is shown in the Room of Roman Britain (Table-Case A). A brass quill-pen cutter, German, about 1700, is shown in the Table-Case, Bay XV. The modern type of pencil was introduced just before the beginning of the nineteenth century, but in the Middle Ages pencils were small rods of lead resembling styli. Examples dating from the fourteenth and fifteenth centuries have been dredged from the Seine, but similar objects were in use considerably earlier.

Inkhorns were doubtless often made of horn, though other materials were common. A pointed bronze example with loops for suspension, found in excavations at Austin Friars, is exhibited in the Table-Case, Bay XV; close to it is an example of horn stamped with figures of saints under canopies. (For *penners* or pen-cases, see p. 211.)



FIG. 164.—
Bone stylus.
Fourteenth
century.

DESCRIPTION OF CASES

BAY XIV.

DESK-CASE (window).—*Scientific Instruments.*

Western Half. English and Italian quadrants of the sixteenth and seventeenth centuries; pairs of compasses and other mathematical instruments; German pillar-dials of the seventeenth century and an English frame for a dial of the early fifteenth century; a German seventeenth-century terrestrial globe; a small German telescope of the seventeenth century in a case; an hour-glass with the arms of Stephen Bathori, King of Poland 1576-86.

TABLE-CASE.—*Watches and Dials.*

East Side (Lady Fellows Bequest, &c.).

First section. Upper part: English watches, one of about 1600, the remainder of the first half of the seventeenth century. Below: on horizontal surface; English dials and perpetual calendars, and a nocturnal (fig. 43) made by Humfrey Cole about 1580, by whom (in 1575) was made an exceptionally fine ring-dial (fig. 42) here exhibited. On the slope: English watches from about 1590 to about 1690, including two said to have belonged to Oliver Cromwell, and one, in a rock-crystal case, made by Edward East, watchmaker to Charles I.

Second section. Upper part: English watches of the seventeenth and eighteenth centuries. Below: on horizontal surface; English and German dials from the sixteenth to the eighteenth century. On the slope: English watches of the eighteenth and early nineteenth centuries, and a series of English watch-movements from the seventeenth to the early nineteenth century.

Third section. Upper part: German watches and clock-watches of the sixteenth and seventeenth centuries; a Swiss watch of about 1620; and a Dutch repeater of about 1710. Below: on horizontal surface; German dials of the sixteenth and seventeenth centuries, mostly with makers' names, examples from Augsburg and Nuremberg. On the slope: German watches and clock-watches of the sixteenth and seventeenth centuries; Dutch and Swiss watches of those centuries.

Fourth section. Upper part: French watches and clock-watches of the sixteenth and seventeenth centuries. Below: on horizontal surface: French dials of the eighteenth century; German dials from the sixteenth to the eighteenth century; a Dutch dial with calendar of the seventeenth century. On the slope: French watches from the sixteenth to the eighteenth century.

West Side (Octavius Morgan Bequest).

First section. On the horizontal surface: German dials of the sixteenth and seventeenth centuries, of various forms, including examples made at Augsburg and Nuremberg, with makers' names. On the slope: German clock-watches of the sixteenth century; German watches, some made at Augsburg, from the sixteenth to the eighteenth century, including examples of fanciful form, e.g. a skull, a book, a pear, &c.



FIG. 165.—Watches. Seventeenth century.

Second section. On the horizontal surface: two standing clock-watches made about 1610, one Swiss, the other German, made by Nicolaus Rugendas of Augsburg; German dials from the sixteenth to the eighteenth century, mostly made at Augsburg; including one in the form of a pair of compasses made by Christoph Schissler (Augsburg) in 1558; pedometers of the seventeenth and eighteenth centuries; combined protractor, folding rule, &c., of the eighteenth century. On the slope: Dutch watches and clock-watches from the end of the sixteenth to the eighteenth century, some with finely enamelled cases (one by J. Toutin, p. 94): a Flemish watch with enamelled figure-subjects, by Jean Hébrat of Brussels, 1640-50; French watches of the seventeenth century, two with astronomical dials.

Third section. On the horizontal surface: German dials of the seventeenth and eighteenth centuries; French dials of the sixteenth and eighteenth centuries; a seventeenth-century Swiss

clock-watch with astronomical dials, in piqué leather case; a wooden Italian dial of the eighteenth century. On the slope: French watches from the seventeenth to early nineteenth century; two made at Blois with enamelled cases painted with figure-subjects; a number showing fanciful forms, cross, tulip, star, &c.

Fourth section. On the horizontal surface: an English repeating watch, 1720-30; English dials, including one with nocturnal made by Humfrey Cole in 1575, from the sixteenth to the eighteenth century. On the slope: French alarum watch made by 'David Remsay Scotus' (p. 47), 1600-10; English watches from the sixteenth to the early nineteenth century, with examples by Edward East (p. 47) and Thomas Tompion (p. 47), and a watch set in a ring, once belonging to George III.

PIER-CASE, D, E, F.—*Clocks and Dials.*

D. Top shelf. Dials and a perpetual calendar, sixteenth to eighteenth century.

Second shelf. Dials of various forms including folding dials; one armillary and one cup-dial.

Bottom. Standing clocks of various forms, some German, with automatic figures driven by the clock mechanism, seventeenth century.

E. Top shelf. At the back: standing clocks, one English (fig. 29), made by Bartholomew Newsam, about 1590-6. In front: German horizontal clocks and table-watches of the sixteenth century.

Second shelf. At the back, on top: dials of the seventeenth century; clocks, one made by Daniel Quare, 1670-80. On step and in front: small dials of various forms, pillar, cruciform, spherical, standing, folding dials, one in the form of a book, engraved with figures derived from Raymond Lull, and made at Rome in 1593.

E. Bottom. Part of a series of lantern-clocks (p. 44) of the seventeenth century; German clock-watches of the sixteenth and early seventeenth centuries; horizontal clocks, mostly German, of the late sixteenth and seventeenth centuries; two globe-clocks of the seventeenth century.

F. Top shelf. German standing clocks (fig. 166) with revolving globes showing the hour and human figures, one with a crucifix, about 1600; French astronomical clock with astrolabe, 1560; fine standing clocks of the sixteenth century, two German, one Italian.

Second shelf. At the back, on top: dials and clocks, one clock signed *N. Vallin*, 1600, probably from Cowdray House, Sussex. On step: ivory dials of various forms, of the sixteenth and seven-



PLATE XIV. CLOCK MADE FOR THE EMPEROR RUDOLPH II ABOUT 1580.

[See p. 42.]

teenth centuries. In front: horizontal clocks of the sixteenth century, two German, one Dutch; fine cup-dial (p. 71) made in Bavaria in 1550 by Bartholomew, Abbot of Aldersbach.

Bottom. Remainder of lantern-clocks (*see* above); three elaborate standing clocks, two German, of the sixteenth and seventeenth century respectively; a clock made by Lucas Weydman of Cracow, 1648.



FIG. 166.—Clocks with automatic figures. German. Seventeenth century.

NOTE. For the large standing clock by Isaac Habrecht in the middle of the gallery opposite Bay XIV, and the clock in the form of a ship, in the Franks Room, Case B, *see* pp. 42, 296, 303.

ON THE PIER BETWEEN BAYS XIV AND XV.

Frame containing a mallet and ball for playing the game of pall-mall, seventeenth century (p. 101 and fig. 57).

BAY XV.

PIER-CASE, A, B, C.—*Astrolabes, Quadrants, and other Scientific Instruments.*

A. Top shelf. On step: English quadrants, the majority of wood, one of wood, of the seventeenth and eighteenth centuries. In front: small planispheric astrolabes of the fourteenth (two English) and fifteenth centuries.

Second shelf. On step: planispheric astrolabes, one English, by 'Blakene', dated 1342. In front: German astrolabes of the sixteenth century, and folding rules with scales, of the seventeenth and eighteenth centuries.

Bottom. Large planispheric astrolabe (plate II) constructed for latitudes of London, Paris, Rome, Durham, York, &c., English work, 1260; an astrolabe made by Cornelius Vinch of Antwerp in 1600; a brass measure for two ells made in 1571; an ivory measure, and wooden foot-rule marked with scales.

B. Top shelf. On top: armillary spheres of the sixteenth century; a French celestial globe, 1659; a rule with sights, compass, &c., made by Erasmus Habermel of Prague, sixteenth century. On step: folding rules and hemicycles of the seventeenth and eighteenth centuries; an instrument for measuring altitudes made at Cologne, 1581; an English quadrant of the eighteenth century. In front: gunners' levels and scales, and instruments for artillery from the sixteenth to the early eighteenth century.

Second shelf. On step: astrolabes of the sixteenth and seventeenth centuries. In front: a case of mathematical instruments made by Bartholomew Newsam, probably for Queen Elizabeth; German quadrants of the sixteenth and seventeenth centuries; a German wind-vane of the sixteenth century; a pair of dividers; a sliding measure for metals and an instrument for measuring distances, both German, sixteenth century.

Bottom. An astrolabe with inscriptions in Roman letters and in Cufic, probably Spanish-Moorish, thirteenth century; an astrolabe made in Paris in 1580: a quadrant of the late seventeenth century; English boxwood nocturnals and an ivory measure with sliding scale; Oriental quadrant made for the latitude of Cairo; French brass folding rule, seventeenth to eighteenth century.

C. Top shelf. On top: English armillary dial, made about 1700; German dial of elaborate form of the early seventeenth century; Italian head of a cross-staff for measuring angles, sixteenth century. On step: brass hemicycles, and a celestial globe made by Muhammad Ibn Ja'afar Ibn Omar in A.D. 1430. In front: gunners' instruments; a Chinese pedometer, and an instrument for recording revolutions, made by Fenn, London.

Second shelf. On step: Italian astrolabe made in 1700; oriental astrolabes. In front: oriental astrolabes dating from the thirteenth to the seventeenth century; two oriental quadrants of the fourteenth century.

Bottom. French astrolabe by P. Danfrie (1558-84); a Persian astrolabe made in 1722; an oriental bronze celestial globe made in 1275.

DESK-CASE (window).—*Runic Calendars, &c.,
Knives, Locks, and Keys.*

Eastern Half. Norwegian Runic calendars of the seventeenth century, and Staffordshire clog-almanacs from the seventeenth to the eighteenth century; sets of 'Napier's Bones' in boxwood and brass; a brass 'horn-book', inscribed 'St. Paul's Infant School, 1729'.

Western Half. Sets of carvers' knives, one set (fig. 102) with enamelled handles having the arms of John the Intrepid, Duke of Burgundy (d. 1419) in a *cuir bouilli* case stamped with the ciphers of his daughter Ysabel, Countess of Penthievre, and her husband, Oliver of Blois; iron knife (c. 1500), found at Windsor; knife with ivory handle and sheath of stamped leather, early seventeenth century, found at Banham Hall, Norfolk; German wooden knife-sheaths of the late sixteenth century carved with scriptural subjects; keys dating from the eleventh century (figs. 106-7, 167); locks with keys, some of elaborate construction, one of the fifteenth century found near Tunbridge Wells. (Chamberlains' keys are exhibited in Table-Case 1; see p. 299.)



FIG. 167. — Key of the eleventh or twelfth century found in Lothbury.

TABLE-CASE.—*Spoons, Knives, and other Objects of Domestic Use.*

East Side. First section. On the horizontal surface: English wooden trenchers of the seventeenth century. On the slope: boxes of roundels or fruit-trenchers of the Elizabethan period, with inscriptions, and figure-subjects or conventional ornament (plate XII).

Second section. Various small objects of domestic use, among which may be mentioned: inkhorns, one bronze, found in London, another horn, both English, fifteenth century; thimbles from the sixteenth to the eighteenth century; pins, scissors, and a pair of

spectacles (German), eighteenth century ; nutcrackers (fig. 128), one pair of bronze, fourteenth to fifteenth century ; apple-scoops of the seventeenth and eighteenth centuries (fig. 168) ; tinder-box and early sulphur matches ; snuff-rasps, one German of the seventeenth century, and a snuff-box in the form of a shoe, end of eighteenth century ; wooden pitch-pipes from Poundstock, Cornwall ; English silver ring-brooch of the late thirteenth century ; a silver lock-ring for a hawk, late seventeenth century.



FIG. 168.—Pastry-cook's knives and apple-scoop.

Third section. On the horizontal surface : hand-warmers, German and Italian, about 1500 ; shaving bowl made from a Seychelles nut, seventeenth century ; bone shoe-horn of the seventeenth century. On the slope : French wooden comb of the fourteenth century with figure subjects ; fragments of wooden comb with remains of inscription, found at Romsey Abbey, Hants—English, fifteenth century ; tortoiseshell comb with inscription and date 1690 ; horn comb with initials and date 1739 ; hat of plaited ivory, probably of the sixteenth century (fig. 169) ; panel of Kimmeridge shale of the fifteenth century, with secular figure-subjects ; pipe-

clay wig-curlers of the seventeenth century (fig. 129) ; sleeve-links and buttons.

West Side. *First section.* On the horizontal surface : miscellaneous small knives ; brass mould for spoons bearing the bust of Queen Anne ; Scandinavian morse ivory spoon with figure of St. George, seventeenth century ; pearwood spoon with figure of the Virgin and Child, St. Michael, &c., German, 1687. On the slope : seven silver seal-headed spoons found together at Netherhampton, Wilts. bearing dates from 1596 to 1632 ; silver apostle spoons of the sixteenth and seventeenth centuries, and three seventeenth-century seal-headed spoons : bronze pastry-cook's knives,

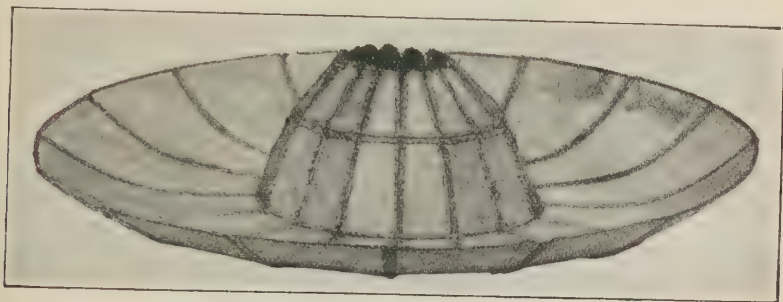


FIG. 169.—Hat of plaited ivory. Sixteenth century.

and an eighteenth-century spoon with pastry-cutter, found in Fleet Street (fig. 168).

Second section. On the horizontal surface : Flemish silver-gilt spoon enamelled and inscribed, about 1500, with original leather case (fig. 146) ; miscellaneous knives. On the slope : spoons of silver, brass, and base metal from the fifteenth to the eighteenth century, illustrating 'apostle', 'maidenhead', 'lion', '*piet de biche*' (with busts of William and Mary, or Queen Anne), and 'seal-headed' types (fig. 147). Other spoons in Franks Room (Case B : see p. 304).

Third section. On the horizontal surface : knives and knife-handles of various materials, some handles in the form of human figures ; steel fork with wooden handle carved with figures playing musical instruments, seventeenth century. On the slope : forks and sets of knives and forks ; pairs of wedding-knives of the seventeenth century, one pair from Scrivelsby, Lincs ; shagreen case of surgeons' lancets, eighteenth century ; steel for sharpening knives, Italian, fifteenth century.

PIER-CASE, D, E, F.—*Sculpture in Bronze, Terra-cotta, and Alabaster; and Miscellaneous Objects.*

D. *Top shelf.* Statuettes in bronze and silver including an eagle, Italian, twelfth to thirteenth century, and a goat, North Italian, fifteenth century.



FIG. 170.—Venetian chopine. Sixteenth century.

Second shelf. Wooden and terra-cotta statuettes of the sixteenth and seventeenth centuries.

Bottom. Miscellaneous objects, including statuettes, a chopine (Venetian lady's clog: fig. 170), and a wooden tablet with writing on wax, of the fifteenth century.

E. *Top shelf.* Bronze statuettes from the fourteenth to the

sixteenth century, among which the figure of a lady and her dog (fig. 125), fourteenth century, and the fifteenth-century St. George may be noted.

Second shelf. Wax model (a torso), attributed to Michelangelo, a terra-cotta torso, perhaps by Bandinelli, and part of a terra-cotta group, Hercules and Antaeus, by John of Bologna.

Bottom. Wooden caskets with gilded and painted gesso ornament, human figures, and conventional designs, Italian, fifteenth century; fire-blower in the form of a hollow bronze head, through the mouth of which steam was directed on the fire; North Italian, late fifteenth century.

D and E. *Bottom.* Bone staff engraved with religious subjects, Italian, seventeenth century; cane ceremonial staff (with leather case) engraved with scenes in medallions, and dated 1599.

F. *Top shelf.* Italian bronze statuettes of the sixteenth century.

Second shelf. Bronze relief, bust of Anne of Brittany (1476–1514), queen of Charles VIII and Louis XII of France (fig. 126); statuette of a serjeant at law, fifteenth century; stone head of a man, *temp.* Henry VII; stone figure of St. George as a knight of the time of Richard II, found at Winchester.

Bottom. Fragmentary alabaster carvings representing the Trinity, Annunciation, Ascension, Coronation of the Virgin, from Kettlebaston Church, Suffolk, English, fourteenth century; Italian alabaster carving of St. Jerome, fifteenth century.

ON THE PIER BETWEEN BAYS XV AND XVI.

Bronze tablet to the memory of Peter Schortz and his wife, Elizabeth Bornschleglin, cast at Bamberg, Bavaria, 1594.

BAY XVI.

PIER-CASE, A, B, C.—*Brass Dishes, Objects in Cuir bouilli, Caskets, &c.*

A. *Top shelf.* Copper-gilt frame for a portrait, French, sixteenth century; Portuguese silver dish, sixteenth century; Nuremberg brass dish with the Annunciation and an inscription, fifteenth century (fig. 171); French *cuir bouilli* casket, fourteenth century; powder-horn and pen-case of *cuir bouilli*.

Second shelf. Brass dishes, probably made by oriental workmen in Venice, fifteenth century; *cuir bouilli* cases of the sixteenth and seventeenth centuries, Italian and Spanish.

Bottom. Pressed horn casket, seventeenth century; bombard (Black Jack) with initials of Charles I, and date 1648 (fig. 103); leather bottle, seventeenth century.

B. *Top shelf.* Nuremberg brass rose-water dishes, fifteenth

century, *cuir bouilli* cases; one used to contain church plate at Little Welnetham, Suffolk—English, early sixteenth century (fig. 172); French and Italian examples of the sixteenth and seventeenth centuries; brass case made for M. Fregoso, 1520.

Second shelf. Brass dishes, South German, fifteenth century; pearwood casket, said to have belonged to Mary Queen of Scots, but probably belonging to a member of the Frazer family, Scot-



FIG. 171.—Brass rose-water dish. Nuremberg. Fifteenth century.

tish, fifteenth century (fig. 173); Italian wooden casket with gesso designs, about 1500, *cuir bouilli* cases; Swiss wooden casket of the fifteenth century.

Bottom. Wooden casket with inscription relating to Anne of Brittany (d. 1514); Catalan casket, embossed, fourteenth century; *cuir bouilli* casket mounted in iron; ibex horn ('gryphon's claw'), with sixteenth-century mount (fig. 65); Scandinavian hunting horn of the fifteenth century.

C. *Top shelf.* Brass dishes, German and Venetian; *cuir bouilli* cases of the sixteenth and seventeenth centuries.

Bottom. Nuremberg brass dishes of the fifteenth century.



FIG. 172.—*Cuir bouilli* case from Little Welnetham.
Early sixteenth century.



FIG. 173.—Pearwood casket said to have belonged to Mary Queen of Scots.

TABLE-CASE.—*Weights, Moulds, Talismans, &c., and Historical Relics.*

East Side. First section. On the horizontal surface: exchequer and private tallies from the thirteenth to the fifteenth century; small bronze weights, including one with the head of Galeazzo Maria Sforza, Duke of Milan (1465-76). On the slope: bronze



FIG. 174.—Bronze mould for casting statuette of the Virgin and Child. Flemish. Sixteenth century.

weights from the thirteenth to the seventeenth century, from Toulouse and other cities in the south of France (p. 249 and fig. 162).

Second section. On the horizontal surface: stone moulds for metal-work. On the slope: moulds of stone, bronze, and pottery, of the fourteenth and fifteenth centuries, including one for making statuette of the Virgin and Child (fig. 174), and a stamp for

making impressions of the Agnus Dei, twelfth to thirteenth century; book-binding stamps of the sixteenth and seventeenth centuries.

Third section. On the horizontal surface: wooden caskets of the fifteenth century; osmund found at West Blatchington, near Brighton; bronze capsule with the Agnus Dei; sergeant's tip-staff, English, eighteenth century; small bronze objects. On the slope: bronze head of a fool's bauble, late fourteenth century (fig. 175); fool's bauble, French, seventeenth century; frames of pouches (*gyppières*) found in England, fifteenth century; bronze furniture ornament, Spanish, seventeenth century: Scottish thumbikins, given by Sir Walter Scott to Sir Samuel Meyrick (fig. 128).

Fourth section. Magical objects. On the horizontal surface: two gilt bronze statuettes, English, fourteenth century; Goa stones; a crystal sphere said to have been used by Dr. Dee (p. 163). On the slope: three wax disks engraved with magical figures and names, used by Dr. Dee; metal talismans of the seventeenth century and later.

West Side. *First section.* On the horizontal surface: wooden roller for impressing designs on pastry, English, seventeenth century; German wooden casket, fifteenth century; silver badge in the form of a horse-shoe, about 1600; state sword of Edward Gibbon, the historian. On the slope: head-stall ornamented with cloisonné enamel, probably made at Venice, sixteenth century; German gilt-copper engraved buckle, probably a 'master piece', 1737; steel *châtelaine*, eighteenth century; state sword of the Earldom of Chester, attributed to Hugh Lupus, created Earl of Chester 1070, but possibly made for Hugh Kevelioc, Earl of Chester 1153-80, the handle an addition of the sixteenth century.

Second section. On the horizontal surface: gilt metal engraved casket signed by Michel Mann, German, end of sixteenth century; portrait-medallion of John Locke, painted in lacquer on copper in Japan, after a French print, eighteenth century; silver medallions with busts of Shakespeare, and inscriptions; casket carved from Shakespeare's mulberry tree and presented to David Garrick with the freedom of Stratford-on-Avon, 1769; silver gilt casket (fig. 67) with arms of Margaret, queen of Edward I, and Isabella, betrothed of Edward, Prince of Wales (Edward II), probably the gift of Margaret to Isabella, 1303-8; ring with miniature of Shakespeare,



FIG. 175. Head of a fool's bauble. Fourteenth century.

late eighteenth century. On the slope: collar of the Order of St. Andrew founded by Peter the Great, Russian, eighteenth century; gilt metal badges, including copper plate of the Guelphic order with name of Freiherr von Best, 1815, and painted arms; copper plate with arms of the Dyers' Company, inscription and date 1634; plate of a knight of the Order of the Bath with inscription and date, 1789; badge of a king's messenger *temp.* George III; enamelled cross of the Order of St. John, early seventeenth century; badges including that of a Westminster magistrate, and the badge of the Anti-Gallican Society with arms of Plomer, English, late eighteenth century.

Third section. On the horizontal surface: base of a plaster cup inlaid with stones and inscribed, a supposed proof (p. 218) against poisons; brass book-cover, made for the Abbess of Nivelles (Adrienne de St. Omer), with arms and date 1523; quadrant designed by Sir John Cheke for Edward VI, engraved by 'W. B.' in 1551; walnut-wood cup mentioned by Shelley in a letter to Maria Gisborne; bust of Jeremy Bentham, philosopher (1748-1832); collar of the Guelphic order, with hall-mark, 1831. On the slope: enamelled garter-plates of Edward Seymour, Duke of Somerset, and Protector, dated 1537 (fig. 50), and Sir Anthony Browne, 1540; stall-plate of Sir William Parr, brother of Queen Catherine Parr, probably broken on his attainder in 1553; planispheric astrolabe made by Humfrey Cole in 1574, afterwards belonging to Prince Henry (son of James I), whose badge is on the leather case; coffin plate of Mary of Modena (d. 1718), wife of James II; pocket dial and nocturnal with arms of Robert Devereux, Earl of Essex, favourite of Queen Elizabeth, made by James Kynvyn, 1593.

Fourth section. On the horizontal surface: punch-bowl of Robert Burns, with inscribed plate; French iron casket of the fifteenth century; lead case made for the heart of Sir Henry Sidney (d. 1586), formerly at Ludlow (p. 112); sleeve-links with portrait of Charles II, English, seventeenth century; gold watch and chain of Robert Browning, with ring worn by Mrs. Browning, and a Venetian coin of 1848; gold snuff-box with Japanese lacquer, given by George IV to Mrs. Siddons; ivory tobacco-stopper belonging to 'Peter Pindar', satirist (1738-1819); two ivory counter-boxes commemorating the birth of Prince Charles Edward, the 'Young Pretender', 1720 (Cat. No. 438); silk garter with Jacobite motto. On the slope: Scottish silver brooches, one known as the Loch Buy brooch, made at Loch Buy, Island of Mull, the other as the Glenlyon brooch, set with pearls and cabochon stones in a mediaeval style; state sword of Edward, Prince of Wales, as Earl of Chester, 1475-83, with enamelled hilt (fig. 148), quadrant of Richard II, English, dated 1399 (fig. 144); engraved silver medallion with portrait of Wilhelm Dilich of Hesse Cassel;

dated 1637; planispheric astrolabe made for Henry VIII by Bastien le Seney; contemporary silver medallion with maps illustrating the voyage of Sir Francis Drake, 1577-80.

PIER-CASE, D. E., F.—*Metal objects, mainly pewter and bronze vessels.*

D. Top shelf. Pewter dishes, three stamped with crown and feather, found near Guy's Hospital, London, and probably of the early Tudor period; pewter lamp with glass reservoir and hours marked on a band, seventeenth century.

Second shelf. Pewter dishes of the sixteenth and seventeenth



FIG. 176.—English skillet. Late seventeenth century.

centuries, including Nuremberg dishes of the seventeenth century; dish with arms of Charles II; porringer stamped with Tudor rose and crown, and initials, probably Dutch or Flemish, sixteenth century; openwork disk of the fourteenth century.

Bottom. Bronze skillets of the fifteenth and sixteenth centuries; wafering-irons with the arms of Loredano and the Lion of St. Mark, about 1500 (p. 245).

E. Shelf. Aquamaniles (ewers) in the form of mounted men, thirteenth and fourteenth centuries; base of a candlestick in the form of a centaur playing a fiddle, thirteenth century (fig. 122).

Bottom. Bronze jug found at Kumasi during British Ashanti expedition (p. 241 and fig. 156), English, about 1400; bronze ewers of the fourteenth century; brass skillets of the seventeenth century with inscriptions on the handles; English cooking-pot, fifteenth century; enamelled roundels for centres of salvers, cups, &c., late fifteenth to early sixteenth century.

F. Top shelf. Pewter dish having enamelled medallion with arms of Charles I (fig. 137); dish by Caspar Enderlein (fig. 138) and tankard (initials F. B. -François Briot) with figure-subjects, sixteenth century; pewter salts of the seventeenth century; sacramental flagon, formerly belonging to the church of Seaford, Sussex, dated 1642.

Second shelf. Pewter plates with religious subjects, seventeenth century; cup found in London, English, seventeenth century.

Bottom. English and German bronze mortars of the sixteenth and seventeenth centuries with ornament and inscriptions (fig. 158).

ON THE PIER BETWEEN BAYS XVI AND XVII.

Bronze door-knocker of the twelfth century (fig. 121), probably made for an abbey church. From c. 1500 it was on the front



FIG. 177.—Monumental brasses: the symbol of St. Mark, fourteenth century, and the Virgin of the Annunciation, fifteenth century.

doors of dwelling-houses on 'Brazen Head Farm', Essex; painted oak panel showing the arms of Belknap, sixteenth century, from Burton Dasset, Warwickshire.

BAY XVII.

PIER-CASE, A, B, C.—*Metal work, mostly bronze.*

A. Top shelf. Bronze bowl, engraved with the figure of Hercules, twelfth century; stand for candle-pricket in the form of a lion,

twelfth to thirteenth century: aquamanile in the form of a lion, fourteenth century; English bronze bell engraved with religious subjects, from Pickering, Yorks, fourteenth century; bronze tripod ewer.

Second shelf. Bronze jugs of the fourteenth century; chafing-dishes of the fifteenth century, one English, from Ousden, Suffolk.

Bottom. Bronze mortars of the seventeenth century; and a set of seven, probably Saracenic, of unknown locality.

B. Top shelf. Romanesque bronze bowls of the twelfth century, one engraved with scenes from the life of St. Thomas (fig. 124), the other with Virtues and Vices (fig. 120); two German aquamaniles, one in the form of a lion, the other in that of a stag, fourteenth century.



FIG. 178.—Pint measures. Seventeenth and eighteenth centuries.

Second shelf. Bronze bowls similar to the above, one engraved with figure of Cadmus and the labours of Hercules, found in the Severn at Haw Bridge in 1824; bronze water-jug with human face, late fourteenth century; English bronze ewers, one c. 1400, one of the fourteenth century.

Bottom. Bronze cauldron and skillets, fifteenth to seventeenth century.

C. Top shelf. Gilt pewter dish with St. George and the dragon, German, seventeenth century; candlesticks from the thirteenth century.

Second shelf. Miscellaneous metal objects, including two English candlesticks, one inscribed, of the sixteenth century; bronze vase, found in the City of London; bronze bell with T-cross, fifteenth century, from Boxgrave Priory, Sussex, and a number of small bronze bells; silver dish of the early fifteenth century from the Castle of Chaleis in Eubœa, with arms of Enghien on back.

Bottom. Front of a leaden cistern of the eighteenth century from old Montague House, which was the first British Museum;

Winchester measure with the initials of Queen Anne, dated 1704 ; quart and pint Winchester measures, dated 1822 and inscribed ; bronze pint measure with initials of Queen Elizabeth and date 1601 (fig. 178).

On the Pier. Two panels of *opus Anglicanum*, one with the Annunciation, Salutation, and Nativity, thirteenth century ; the other with Our Lord charging the Apostles, and the Betrayal, c. 1300 (fig. 151 and p. 236).

TABLE-CASE.—*Foreign Seals, Pilgrims' Signs, Crucifix-figures, Absolution and Mortuary Crosses, Money Weights, Papal Bulls and Stamps.*

East Side. On the horizontal surface : boxes of money weights, seventeenth and eighteenth centuries, including one fine box made for the Earl of Worcester (d. 1646) ; stamps for making papal bulls, and bull of Pope Paul I ; mortuary crosses (p. 1).

First section. On the slope : matrices of Italian and Spanish seals, including that of Giovanni Delfino as Venetian representative at Constantinople, early fourteenth century ; of the Treasury of St. Isidore, Seville, thirteenth century ; and others.

Second section. Lead pilgrims' signs, mostly of the fourteenth and fifteenth centuries (figs. 179, 180), and a stone mould for casting figures of St. Thomas of Canterbury (fig. 16).

Third section. Lead pilgrims' signs from the collection of the late Thomas Greg, Esq., F.S.A. ; series of bronze pilgrims' signs or amulets, French, late fifteenth and sixteenth centuries, from the collection of the late Sir John Evans ; crucifix-figures, two of the thirteenth century, one being enamelled, Limoges.

West Side. *First section.* On the horizontal surface : two guinea balances, eighteenth century.

First section. On the slope : German, Swiss, and Flemish seals—fine early matrices of the Convent of St. Gereon, Cologne, the Church of SS. Peter and Gorgonius of Minden, and the Church of St. Mary, Königsdorf (near Cologne?), twelfth century ; of the towns of Boppard, thirteenth century, Deutz, about 1300 ; of the Church of St. Castor, Carden, district of Coblenz ; the Guild of Cordwainers, Cologne, fourteenth century ; of the priests of the Fraternity of the Virgin Mary, Zwolle, Overijssel, Netherlands, fifteenth century ; judicial seal of Sigismund as King of the Romans, &c. (elected Emperor 1410, d. 1437), and others ; of the Consuls of Basle and the Dizaine of Goms, Valais, fourteenth century.

Second section. French seals of the thirteenth century and later, ecclesiastical, municipal, and personal ; including seals of the Leper House of St. Radegund of Lievray, Normandy (found with the fine seal of Boxgrave Priory in Table-Case, Bay XVIII),



FIG 179.—Pilgrim's sign. Fourteenth century.

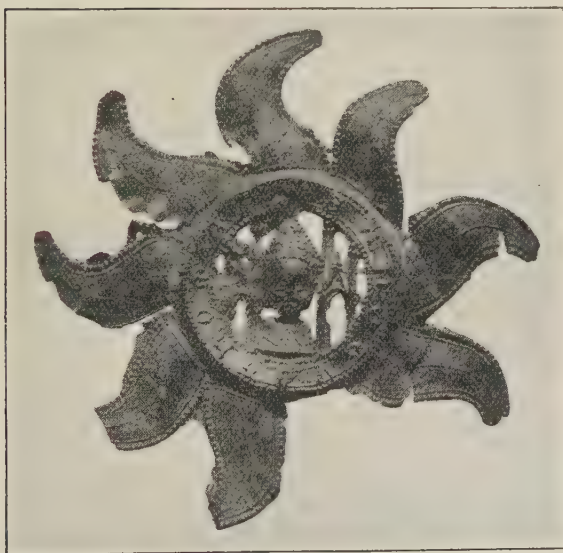


FIG. 180.—Canterbury pilgrim's sign. Fourteenth century.

and of the Treasury of Langres, both fourteenth century; the Convent of regular Canons of Lille, dated 1411; Jean Parnaut, Provost of Varennes, fifteenth century; and others of the following centuries.

Third section. Italian seals including those of Bartolomeo Querini, Bishop of Castello (d. 1291); of the College of Canon Law, Bologna, fourteenth and fifteenth centuries; of the Chapter of the Cathedral Church of Udine, Friuli, a fine fourteenth-century seal; of the College of Justices of Perugia; of the city of Siena; the Provincial of the Franciscans in Dalmatia; Bartolomeo, Archbishop of Conza della Campania, 1359-89 or 1390; the Episcopal Court of Todi, Umbria, and Jacobus d'Ygnano, Doctor

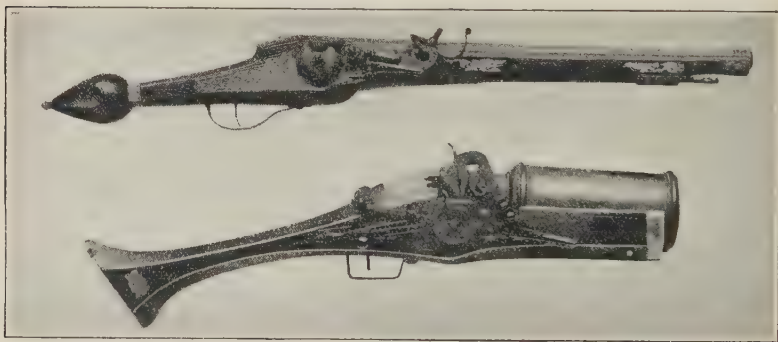


FIG. 181.—Wheel-lock pistol, 1607. Hand-mortar for firing grenades. Sixteenth century.

of Laws, all of the fourteenth century; of Francesco Bellante, Bishop of Grosseto; Bartolomeo Zabarella, Archbishop of Florence; Antonio Davila, Bishop Suffragan of Modon; Pandolfo, son of Galeotto Malatesta: the Convent of St. John and St. Paul at Venice authorizing admission to the library which, after 1494, was called the Library of St. Mark, all of the fifteenth century; seals of cardinals, archbishops, bishops, and others of the sixteenth century and later.

PIER-CASE, D, E, F.—*Arms.*

Swords and daggers (fig. 5) of mediaeval and later date; crossbows of the sixteenth century (fig. 7), one inlaid with ivory (E); windlass for drawing a crossbow (D); sword of the fourteenth century with inscribed blade, found in the river Witham (E, shelf, and fig. 8); German hand-mortar of the sixteenth century inlaid with ivory (fig. 181), and wheel-lock pistol, 1607 (fig. 181) below shelf (E); war maces; sword-pommels of various dates (fig. 9) on

shelf (E) ; halberds, partisans, pikes, &c., in bottom of case ; shield of parade, French, fifteenth century ; circular shields and bucklers ; powder flasks, sixteenth to seventeenth century.

SOUTH PIER, ADJOINING FRANKS ROOM.

North Side. In frame: figured silks from the robe and head-dress of the Emperor Henry VI, found at Palermo ; fragments of



FIG. 182.—Leather shoes, sheaths, &c. Fourteenth and fifteenth centuries.

vestments from the tomb of Walter de Cantelupe, and smaller fragments from that of Bishop Hotham of Ely. Other textiles are exhibited in Table-Case 2 (p. 301). In another frame: leather shoes, pouches, sheaths, &c., of tooled or embossed leather, found in London and dating from the fourteenth and fifteenth centuries (fig. 182).

NORTH PIER ADJOINING FRANKS ROOM.

SOUTH SIDE.

Frames containing Monumental Brasses.

Left frame : shields, one palimpsest (see p. 29), having on one side the arms of Fitzadrian of the late fifteenth century, on the other a merchant's mark of earlier date (fig. 183). Other palimpsests, including two circular plates, one having on one side the heads of a priest and of four boys, about 1430, and on the reverse

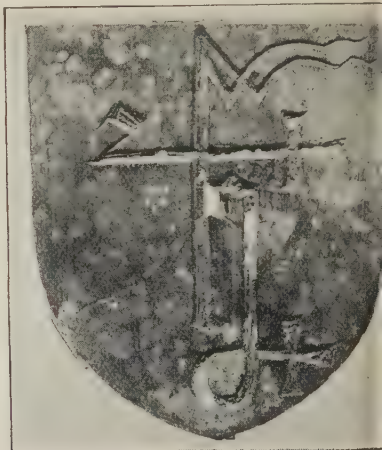


FIG. 183.—Palimpsest brass : arms of Fitzadrian, late fifteenth century, and merchant's mark, sixteenth century.

a mathematical instrument of the seventeenth century ; the second, on one side a priest named Thomas Quythed, about 1460, and on the reverse a pair of compasses of the seventeenth century (fig. 184) ; a beautiful fragment representing part of a man wearing a tabard with arms of Fitzwilliam, about 1550 (fig. 21) ; quatre-foil plates with the symbols of the Evangelists of the fifteenth century (fig. 177) ; fragments and letters from inscriptions of the fourteenth century and later.

Middle frame : English civilians of the fifteenth and seventeenth centuries ; man in armour, about 1510 ; the Virgin of the Annunciation, fifteenth century (fig. 177) ; a group of seven daughters, about 1470, with portion of a figure, perhaps foreign, on the reverse ; another with sons on both sides, early sixteenth

century : two skeletons in shrouds, English, sixteenth century ; head of a lady, *c.* 1490–1500.

Right frame : fragments of the canopy from the brass of Peter



FIG. 184.—Palimpsest brass : Thomas Quythed, about 1460, and pair of compasses, seventeenth century.



FIG. 185.—Monumental brass : a civilian. Fifteenth century.

de Lacy (d. 1375) from Northfleet, Kent ; a civilian, *c.* 1465 ; palimpsest, a group of daughters (*c.* 1480) cut out of a group of sons (*c.* 1450) ; shields of arms of the fifteenth and sixteenth centuries, one (arms of Rickhill) showing traces of mastic inlay.

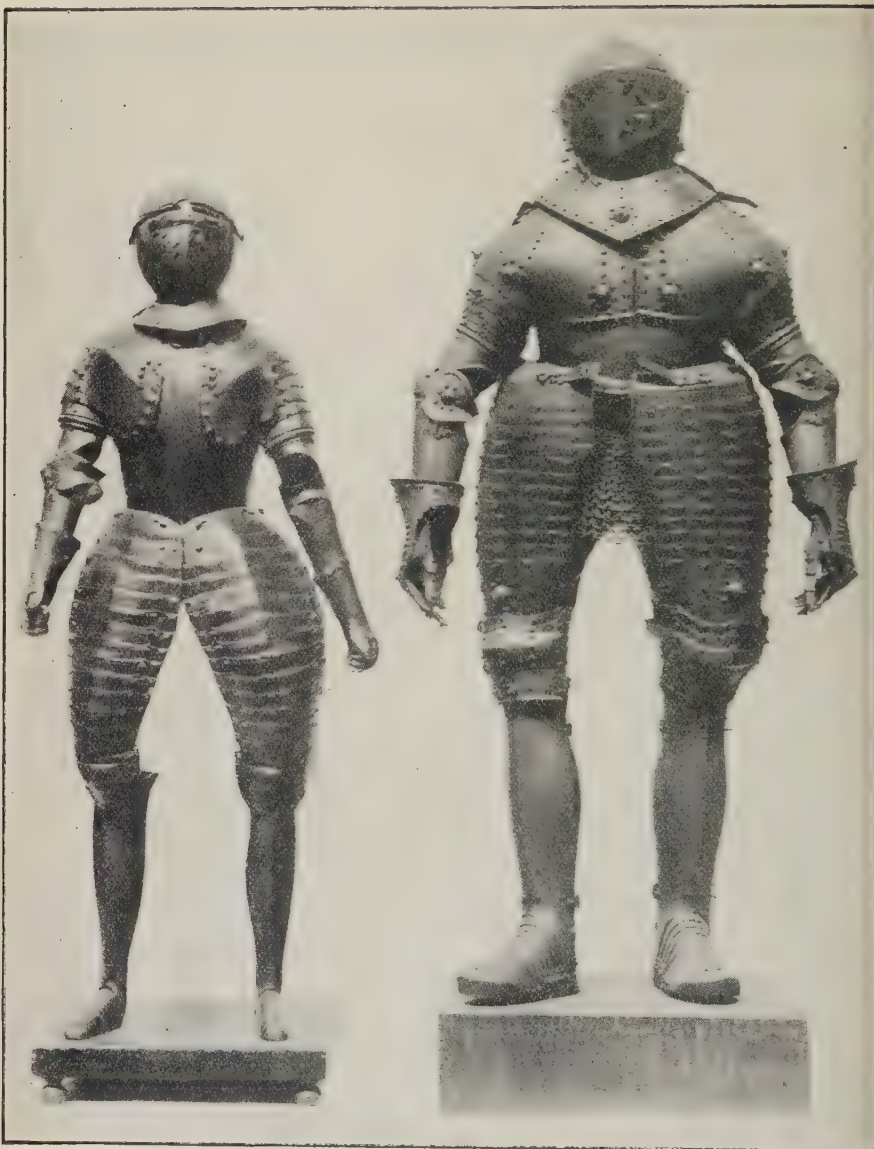


FIG. 186.—Model suits of armour. Early seventeenth century.

NORTH SIDE (PIER-CASE).

Defensive Armour.

Top shelf. Helmets from the fourteenth to sixteenth century, the oldest from Kordofan (fig. 6).

Second shelf. Head-pieces of the sixteenth and seventeenth centuries, including a spider-helmet, morions, one engraved, French, late sixteenth century, and an English pikeman's steel cap of about 1620 (fig. 6), a head-piece of brigandine armour (fig. 189) from Davington Priory, Kent.

Bottom. Brigandine and jazerine jackets of the fifteenth and sixteenth centuries; part of a fluted suit said to have belonged to a King of Poland, German work of the sixteenth century; cuirass and gorget of scale armour with fluted helmet, Polish, early seventeenth century; two small models of complete suits, probably French, of the beginning of the seventeenth century (fig. 186); square-toed solerets, German, early sixteenth century; iron boots, early seventeenth century; series of stirrups. At the back: portion of a linen trapping with appliqué arms of William de Fortibus, 3rd Earl of Albemarle (d. 1260), and his wife Isabella de Redvers, Countess of Devon.

DESK-CASE. North Wall adjoining Franks Room.

First section. Series of mediæval brooches belonging to the Franks Bequest.

Second section. Silver panel showing the Trinity with the dead Christ in relief, signed by P. van Vianen, 1670 (Barwell Bequest); silver triptych with St. Anne, Flemish, late fifteenth century (Barwell Bequest); copper gilt panel, set with two gems, a saint with book and tau-staff, sixteenth century; copper gilt plaque from a German reliquary of about 1200, with scroll designs and names of SS. Kilian, Maximus, Eusebius, and others.

Third section. 'Standard' or collar of mail, of the fifteenth century (fig. 12), and other specimens of chain mail.

Fourth section. Jet figures of St. James of Compostella, sixteenth and seventeenth centuries (p. 134); jet panel, with scenes from the life of Joseph, sixteenth century; Papal rings (p. 153) and other large rings of similar character, chiefly of the fifteenth century.



FIG. 187.—Papal ring.

ON WALL ABOVE DESK-CASE.

Wooden relief representing the Adoration of the Magi, by Tilman Riemenschneider, sixteenth century (fig. 188); portions of brigandine jackets in frames, fifteenth century.



FIG. 188.—Carved panel by Tilman Riemenschneider.
Sixteenth century.

BAY XVIII.

Matrices of English Seals; English Weights.

East Side. *First and second sections.* Seals of ecclesiastical officials and jurisdictions and of religious foundations from the twelfth to the eighteenth century, including the silver seal-matrix

of Chichester Cathedral (p. 167 and fig. 111) ; a bronze matrix of the Priory of St. Mary Magdalene, West Bromwich, twelfth century ; bronze matrix of the Priory of Hatfield Peverel, Essex, fourteenth century ; a silver matrix of the Archbishop of Canterbury's Commissary for Visitations, of the fifteenth century ; silver seal of William, Abbot of Strata Florida (Stratfleur, Cardiganshire) of the late fourteenth century ; Thomas Peverell, Bishop of Llandaff, 1398-1407 ; Paschal, Abbot of St. Mary Graces near the Tower, 1420-1 ; seal of Richard Edenham, Bishop of Bangor, 1464 ; seal of All Saints', Derby, middle of fourteenth century ; John Sante, Abbot of Abingdon, 1469-95 : seals of deaneries, archdeacons, vicar-generals, commissaries, &c. ; matrix in morse ivory of the Benedictine mitred abbey of St. Albans, Herts., twelfth century ; beautiful composite bronze matrix of

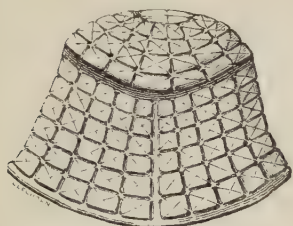


FIG. 189.—Brigandine cap, from Davington Priory, Kent.

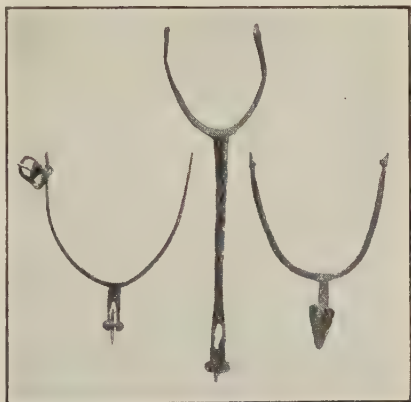


FIG. 190.—Spurs. Thirteenth and fifteenth centuries.

the thirteenth century belonging to the Benedictine Priory of SS. Mary and Blaise at Boxgrave, Sussex ; bronze matrix of the Priory of St. Mary, Langdon, Kent ; bronze matrices of St. John's Hospital, Shaftesbury, Dorset, thirteenth century ; of the Carmelite Priory of Marlborough, Wilts. ; the Black Canons Priory of St. Denis, Southampton (fig. 112) ; the Cluniac Priory of St. Mary, Tickford, Bucks ; the Priory and Convent of the Holy Cross, Cottingham, East Riding, Yorks., dated 1322 ; the Chantry of Thomas de Brembre, Wimborne, Dorset ; the Abbey of St. Agatha, Easby, Yorks. ; the College of the Holy Trinity, Stratford-on-Avon, all of the fourteenth century ; seals of the Friars of the Holy Trinity, Hounslow ; the Premonstratensian Abbey of St Radegund, Bradsole, Kent ; the Guild of the Holy Cross, Stratford-on-Avon ; the Fraternity of the Guild of St. John the Baptist, St. Lawrence, and St. Anne, Knoll, Warwick ; the Fraternity of St. Thomas the

Martyr in Rome, all of the fifteenth century; sixteenth-century matrices of the Guild of St Mary, Thetford, Norfolk; the Hospital of St. Stephen, Norwich; and of the Crutched Friars, Hart Street, Tower Hill, London.

Third section. Personal seals in chronological order, beginning with examples of the twelfth century. Especially interesting are the beautiful silver matrix of the seal of Joanna, daughter of Henry II of England (b. 1165, d. 1199), as Queen of Sicily, and as Duchess of Narbonne, Countess of Toulouse, and Marchioness of Provence (fig. 112); the silver matrix of the seal of Robert Fitz-Walter (fig. 112), which from the arms engraved upon it

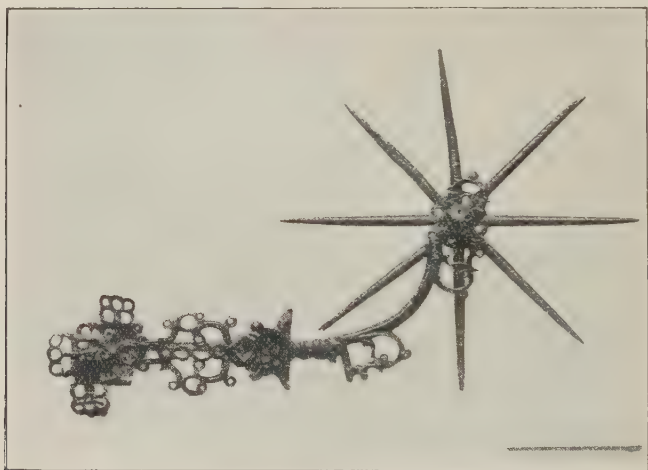


FIG. 191.—Spur. Sixteenth century.

must have been made for the fifth Baron between 1298 and 1304, though the style of the work would indicate an earlier period; a contemporary lead forgery of the seal of Henry II, Duke of Normandy and Aquitaine and Count of Anjou, the original being used between 1171 and 1174, and ancient lead forgeries of seals of bishops of Lincoln and Durham in the twelfth century, and an Archbishop of Canterbury at the close of the following century; and three silver matrices made for Sir Walter Raleigh as Warden of the Stannaries, Captain of the Queen's Guard, and Governor of Virginia (fig. 192).

West Side. First section. Seals for labourers' passes under the Statute of Cambridge 1388 (see p. 171 and fig. 113); seals of sheriffs and mayors, including a fine silver matrix of the thirteenth century of the mayoralty of Lincoln and three bronze matrices of

sheriffs of Oxford in the fourteenth and fifteenth centuries; seals for customs and subsidies, the finely cut Edwardian customs' seals being worthy of notice (fig. 113); seals of peculiar ecclesiastical jurisdictions dating from the fifteenth and sixteenth centuries; seals of companies and corporations, including those of the Weavers' Company (fig. 113), the Fraternity of Tailors at Exeter, the English Merchants in Holland, the Wardens of Rochester Bridge, Kent, all of the fifteenth century; the common seal of Criccieth, thirteenth century; seal with a merchant's mark (cf.



FIG. 192.—The Raleigh seals (the impressions above, the matrices below).

fig. 98); seals for the delivery of wool and hides, chiefly of the reign of Edward I (fig. 113); seals of high officials under the Crown, including those of Thomas Beaufort, Duke of Exeter and Earl of Dorset, as Lord High Admiral (1416), and of John, Duke of Bedford, Regent of France, as Lord High Admiral (d. 1435); of other admirals of the fifteenth century (fig. 112); and of William de la Pole, Marquis of Suffolk and Lord of the Honour of Richmond, Yorks (1445–50). Various other seals, and leaden impression of seal of the Order of the Garter, seventeenth century.

Second section. Seals, chiefly of the fourteenth century, with love mottoes, religious mottoes and invocations, and mottoes of a more general character, some in the form of rebuses; seals of the

fourteenth century set with antique and mediaeval intaglio gems (p. 170 and fig. 114), among which may be mentioned a silver matrix of the early fourteenth century with Lombardic inscription **IESVS . EST . AMOR . MEVS** and an antique intaglio in cornelian found in a field near the collegiate church of Stoke, by Clare, Suffolk; jet matrices, one of the late thirteenth century, found at Dorchester, Oxon.

Third section. Scottish seals: seals of the Chapter of the Church of St. Mary, Caithness, and the Borough of Dunblane, Perthshire, thirteenth century; seal of the Augustinian Abbey of St. Mary and St. John the Evangelist, Inchaffrey (*Insula Missurum*), Strathearn, Perthshire, fourteenth century; the Vicar of the Dominicans, fifteenth century; the Cistercian abbey of St. Mary, Newbottle, Midlothian, sixteenth century; and others. Irish seals: Brian O'Neill, King of the Irish of Ireland, 1258; the Abbot of the Austin Canons of SS. Peter and Paul, Clones, Co. Monaghan; the clergy of the diocese of Kilmore, both fourteenth century; John de la Pole, Earl of Lincoln and Lord-Lieutenant of Ireland (1484-7).

On the horizontal surface. English weights and scales, including spherical steelyard weights with arms of Richard, Earl of Cornwall, as King of the Romans; steelyard weight in the form of a human head; weights for half a stone, chiefly of the seventeenth century; small sets of weights of the sixteenth century; pound weight of lead with stamp of Henry VII (a portcullis), probably from Icklingham, Suffolk; lead weight (about $15\frac{3}{4}$ oz.) with stamp of the Plumbers' Company (p. 249) and dagger of London, seventeenth century.

PIER-CASE, A, B, C.—*Objects of Ecclesiastical Use.*

A. Shelf. Silver gilt crucifix forming a reliquary, early fifteenth century; Flemish monstrance of gilt copper, fifteenth century; processional cross with Sienese translucent enamels (Borradaile Bequest), late fourteenth century; German copper gilt monstrance, fifteenth, and a crucifix of the late fourteenth century; bronze reliquary, model of a church, Venetian, fifteenth century; German coffer-shaped portable altar of wood, covered with silver plates engraved with heads of saints, thirteenth century; paxes of the late fifteenth century, one Italian, with the Crucifixion and other subjects, found in the ruins of Lenton Abbey, Notts.

Bottom. Processional crosses and crucifixes of the fifteenth and sixteenth centuries; Italian copper-gilt ciborium, fifteenth century; silver gilt ciborium, Spanish, sixteenth century; German altar-cruets of pewter, early nineteenth century.

B. Top shelf. Altar service consisting of a chalice, paten, ciborium, candlesticks, and crucifixes, from the Hospital de la

Vera Cruz, at Medina de Pomar, near Burgos, founded by Don Pedro Fernandez de Velasco, who retired there in 1459. The objects bear his arms and the badge of the hospital. The ciborium, paten, and candlesticks are probably of Don Pedro's time, the other objects rather later.

Second shelf. Gilt copper incense-boats (fig. 24) of the fifteenth century; German silver-gilt paten, early seventeenth century (Barwell Bequest); communion-cup and paten with Norwich hall-mark of 1566, from Wiggenhall St. Germans, Norwich; silver communion-cup and cover, with hall-mark of 1567 (plate III); portable altar or super-altar (p. 232 and plate XIII) of marble and copper-gilt, dating from the thirteenth century, engraved with the symbols of the Evangelists, and SS. Peter, Andrew, Stephen, Laurence, and enriched with two portraits of saints painted on vellum beneath crystal, and two panels of carved ivory with the Crucifixion and Virgin and Child, of earlier date than the altar itself, the back of the altar engraved with names of saints whose relics the altar contained; Flemish chalice of the fifteenth century; silver chalices with enamels, Sienese, early fifteenth century; copper gilt chalice with enamels by Christoforo de Ser Nerocio of Siena, early fifteenth century.

Bottom. Censers, twelfth to sixteenth century, and a fine censer-cover of architectural form (p. 34 and fig. 23); English bronze ciborium of the fifteenth century; base of a pricket candlestick, thirteenth century; bronze chrismatory found at Cologne, thirteenth to fourteenth century; funeral chalices and patens, thirteenth and sixteenth centuries; oak crozier with pine shaft, found in St. Stephen's Chapel, Westminster, with a body presumed to be that of William Lynde-



FIG. 193.—Bronze censer. Fourteenth century.

wode, Bishop of St. Davids and Privy Councillor (d. 1446); bronze sacring bell found on the site of the old church at West Blatchington, Sussex, fifteenth century.

C. Shelf. Gilt bronze pricket candlestick, German, thirteenth century; chef (p. 39 and plate X) of the thirteenth century for the head of St. Eustace, from Basle Cathedral, the filigree wreath set with antique gems and precious stones: crystal vessel said to have been given by Charles the Bald (823-77) to the Abbey of Compiègne (Barwell Bequest).

Bottom. Copper gilt crucifix, with the Resurrection and symbols of the Evangelists at the back, Italian, fifteenth century; gilt copper figure of St. Cecilia, Southern French, thirteenth century; crucifix, probably enamelled at Siena, c. 1400.

On the shelf at the back: two gilt bronze panels with subjects in relief, one the Crucifixion, the other a saint, French, fourteenth century.

BAY XIX.

PIER-CASE, D, E, F.—*Enamels, mostly Mediaeval, and Objects of Ecclesiastical Use.*

D. Top shelf. Enamels: cross with Old Testament scenes, attributed to Godefroid de Claire (fig. 44); two semicircular panels, perhaps by the same artist and from an altar-piece, with figure of Henry of Blois, brother of King Stephen, and Bishop of Winchester, 1129-71, with inscriptions referring to him round the border (fig. 45); cross, Limoges, twelfth century; processional cross with translucent enamels, Italian, fifteenth century (Barwell Bequest).

Second shelf. Enamels: book-covers of champlevé enamel, Rhenish, twelfth century; another, c. 1200, with Our Lord in Majesty.

Bottom. Fine Flemish brass with the head of a bishop, 1363-70 (fig. 20).

E. Top shelf. Gilt copper crozier (plate IV) with applied foliate ornament, nielloed plaques and cabochon stones, attributed to Frère Hugo of the Priory of Oignies (p. 187), first half of the thirteenth century. Enamels: four croziers, Limoges, thirteenth century; book-cover with Our Lord in Majesty and symbols of Evangelists, Limoges, early thirteenth century, and panel with the Crucifixion, Limoges, thirteenth century (Barwell Bequest); bowl with openwork foot (fig. 47), enamelled with busts of angels, and set with coloured pastes, made at Limoges in the thirteenth century in the same style as the ciborium in the Louvre, signed by G. Alpais; enamelled candlesticks made at Limoges in the late twelfth and the thirteenth centuries, one with the arms of Nesle and Dreux (fig. 22).

Second shelf. Fine rectangular marriage-casket, Limoges, *c.* 1200, with secular subjects enamelled on a ground engraved with *vermiculé* scroll design (fig. 32) like that on an adjoining reliquary and on another in the Waddesdon Bequest (No. 19); two panels with figures of the Virgin and St. John respectively, with engraved backgrounds like those of the caskets just mentioned, Limoges, *c.* 1200; five gable-ended chasses or reliquaries (figs. 46 and 194) of the same date, of wood covered with enamelled plaques, one having scenes representing the martyrdom and entombment of Thomas à Becket (fig. 194).

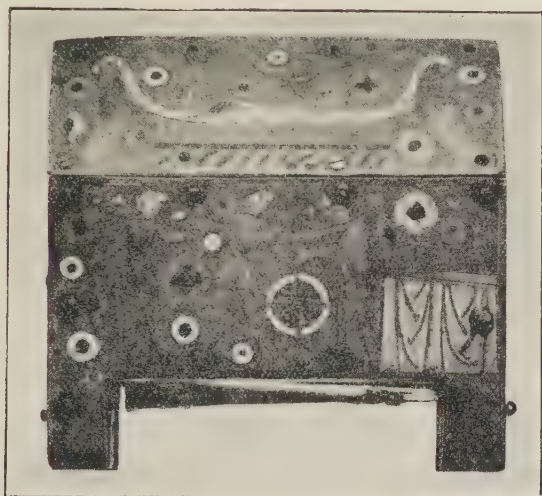


FIG. 194.—Enamelled reliquary. Limoges. Early thirteenth century.

Bottom. Bronze censers and censer-tops from the eleventh to the fifteenth century, including a censer-cover found at London Bridge, English, eleventh century (fig. 123), the shape of interest from its relation to contemporary Saxon architecture; enamelled bases of ciboria, French, fourteenth century; two small brass reliquaries with large inscriptions in black-letter, English, fifteenth century; enamelled pricket candlestick, Limoges, first half of thirteenth century; gilt bronze portion of a reliquary, thirteenth century.

F. Top shelf. Processional crosses, and crucifixes, one Spanish of the fourteenth century with enamelled panels formerly fixed to the front, two English of the fifteenth century, one said to be from Glastonbury Abbey; gilt copper statuette of the Virgin and Child, German, twelfth century.

Second shelf. Gilt bronze cross, Italian, fifteenth century;

silver gilt shrine with architectural ornament, fifteenth century ; gilt copper reliquary with the figure of a king, early fourteenth century ; bronze cross, English, fifteenth century.

Bottom. Bronze processional cross, Spanish, sixteenth century ; crystal cross with relics, sixteenth century (Barwell Bequest) ; English and Russian enamelled brass candlesticks (fig. 51) of the early seventeenth century.

TABLE-CASE.—*Mediaeval and Painted Enamels.*

West Side. *First section.* Early mediaeval enamels. On the horizontal surface: Byzantine cloisonné medallions of the eleventh



FIG. 195.—Armorial pendants. Thirteenth and fourteenth centuries.

century, one with busts of St. George and St. Theodore, the other with St. Nicholas and St. Basil ; two very primitive cloisonné panels with the symbols of St. Mark and St. Luke, probably Italian of the twelfth century ; German enamelled pax of the twelfth century ; band with inscription and scrolls. On the slope : enamels from Lorraine, chiefly from the Meuse Valley, some by Godefroid de Claire, and from Cologne, twelfth century, including panels with scenes from the Old Testament and busts of angels, end of twelfth century ; a panel with St. James and St. John, twelfth century (Barwell Bequest), and others ; cloisonné medallion representing a horseman with a hawk, twelfth century, probably obtained in Italy ; arched bands with inscriptions, from a shrine.

Second section. On the horizontal surface : enamelled gemelions (p. 243 and fig. 196), made at Limoges in the thirteenth century. On the slope : cover of a fine enamelled copper ciborium



PLATE XV. ENAMEL REPRESENTING THE DAUPHIN, SON OF FRANCIS I.

By Léonard Limousin.

with figures of men, animals, and monsters, German, late twelfth century; champlévé panels, medallions, figures from shrines, thirteenth and fourteenth centuries; two book-covers, Our Lord in Majesty and the Crucifixion, Limoges, thirteenth century.

Third section. On the horizontal surface: enamelled chässe with gable ends and scenes representing the murder of Thomas à Becket, and saints, Limoges, first half of the thirteenth century, and front of chässe with the same subject, Limoges, thirteenth century; panel with three angels, Limoges, thirteenth century; bronze parts of horse-trappings showing attachment of armorial pendants (fig. 3); enamelled pyxes (p. 220 and fig. 143), late twelfth and thirteenth centuries; enamelled panel with a soul rescued from hell, fourteenth century. On the slope: armorial pendants (p. 5) from the thirteenth to the fifteenth century.

Fourth section. On the horizontal surface: pair of enamelled gemellions (p. 243); shield with arms of Gernon, from Leeze Priory (p. 86); three enamelled medallions, two Italian, fourteenth century; pyx with figures of angels, Limoges, late twelfth century; box of tarsia work with enamelled medallion of Pope Julius II, Italian, early sixteenth century; enamelled medallion with inscription made by Hans Schwartz about 1520, and others; enamel plaque inlaid with gold, French, sixteenth century (Sloane Collection). On the slope: four circular medallions beautifully painted with portrait heads, North Italian, about 1480; glass pastes, with arabesques in gold and enamel, one in the style of Etienne de Laune, French, sixteenth century; silver medallion copying a *lion d'or* of Philippe de Valois (1328-50); silver medalion with arms of Antoine de Lens (d. 1672), who married Agnes de Gros, Flemish, seventeenth century; another with shields of arms, Italian, fifteenth century; two small panels of translucent enamels attributed to Cologne, fourteenth or early fifteenth century (fig. 197); Italian and French translucent enamels, fourteenth century, on sunk relief in silver; panel of translucent enamel, an apostle, French, fifteenth century; silver crucifix with translucent enamels, Italian, fourteenth century; three medallions from Wardon Abbey, Beds., one with the Abbey arms, bearing three pears.

East Side. Painted enamels, chiefly belonging to the Barwell Bequest.

The series of Limoges painted enamels had remained unrepresentative until 1913, in which year the bequest of Canon A. H. Sanxay Barwell raised the collection to a level worthy of a great museum.

First section. On the horizontal surface: salt-cellar with figures of gods and goddesses by Léonard Limousin II; plate with Joseph receiving his brethren by Jean Courtois; bowl with the Baptism, seventeenth century. On the slope: mirrors enamelled on the

back, one signed by Jean Limousin II, another by Suzanne Court, and a panel, the Adoration of the Shepherds, signed by her; mirror, signed I. G., of the school of Pierre Courteys; panels with scenes from the life of Our Lord, and figures of saints.

Second section. On the horizontal surface: dish and two square panels with conventional designs in blue, white, and gold, and salt-cellar with shields of arms, all Venetian, sixteenth century. On the slope: paxes with figures of saints, one from the *atelier* of Pierre Reymond; panels with religious subjects, one signed by Jean Pénicaud II, another of the school of Pierre Courteys.

Third section. On the horizontal surface: three Italian paxes



FIG. 196.—Enameled gemellions. Limoges. Early thirteenth century.

(fig. 52), one Venetian, sixteenth century (Franks Collection); salt-cellar with gallants dancing, Pénicaud school; bowl of variegated agate (Sloane Collection). On the slope: medallion and panel by Jean Pénicaud II; panel, Pénicaud school; panel representing two ages of man by Pierre Courtois; two panels, school of Martin Didier.

Fourth section. On the horizontal surface: agate casket with silver mounts and a small agate bowl with silver mounts; lapis lazuli flask with silver gilt mounts, French, seventeenth century; enamelled tazza signed by Jean Court, the gathering of manna. On the slope: panels by KIP and of the Pénicaud school, including grisaille examples, one with a delicate representation of the Virgin and Child, by KIP; panels by Pierre Reymond and Martin Didier.

PIER-CASE, A, B, C.—*Painted Enamels.*

A. Shelf. Circular panel with the Virgin and Child, Pénicaud school; oval panel, busts of the Virgin and Our Lord, by Couly Nouailher (Noylier).

Bottom. Enamels in grisaille: large triptych with scenes from the life of John the Baptist, by Martin Didier (Barwell Bequest); circular plaque with Diana and hounds, of the Pénicaud school; tazza with the Banquet of the Gods, from the engraving by Marcantonio after Raphael; purse, probably by Nouailher

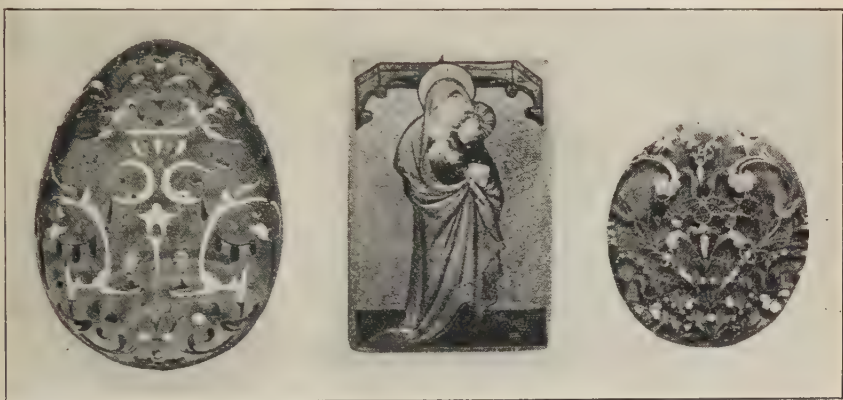


FIG. 197.—Plaque of translucent enamel. Cologne, Fourteenth century.
Two glass enamelled medallions. French. Sixteenth century.

(Noylier), and panel with St. Henry the Emperor, seventeenth century.

B. Top shelf. Panels of the earlier period: the Holy Family, the Resurrection, by Nardon Pénicaud (p. 90), Barwell Bequest; the Bearing of the Cross, school of Jean Pénicaud I.

Second shelf. Fine triptych, by Nardon Pénicaud (p. 90 and plate VI); pax with *pietà*; leaf-shaped panel with the Tree of Jesse, about 1500; all in the Barwell Bequest.

Bottom. Panels (Barwell Bequest): the Circumcision; the Annunciation with kneeling figures, signed P. Ourteys (Courteys); the High Priest rending his garments.

C. Top shelf. Casket with panels showing cupids in various occupations, Limoges, sixteenth century; triptych with the Flagellation, Crucifixion, and Deposition from the Cross, school of Nardon Pénicaud; casket with ten panels representing the Labours of Hercules, Pénicaud school (fig. 55); all in the Barwell Bequest.

Second shelf. Companion panels, signed by Léonard Limousin and dated 1536, one representing St. Antony and the Archer and arms of Antoine de Langeac, Abbot of St. Antoine de Viennois and nephew of Jean de Langeac, Bishop of Limoges (Barwell Bequest), the other representing St. Anthony visiting St. Paul the Hermit in the desert, with the same arms; crescent-shaped panel showing a landscape with figures, signed by Pierre Courteys (Barwell Bequest).

Bottom. Panel, St. Hubert and the Stag, by Jean Limousin, and tazza, the Deluge, by Jean Courtois (Barwell Bequest); panel, the Ascension, signed by N. B.; another, the Betrayal, probably by N. B. (Barwell Bequest).

BAY XX.

PIER-CASE, D, E, F.—*Painted Enamels.*

D. Top shelf. Medallion showing the bust of a reformer, by Léonard Limousin (Barwell Bequest); panel, St. Matthew, by Jean Pénicaud II; medallion, by Léonard Limousin, with portrait of Francis the Dauphin, son of Francis I, on the front (plate XV) and on the back a portrait of his father.

Second shelf. Panels: Presentation in the Temple and Marriage of the Virgin (Barwell Bequest); circular plaque, the Annunciation: on the back the mark of the Pénicaud family.

E. Top shelf. Panels representing Faith (Barwell Bequest) and Hope, and a panel with the figure of St. John (Barwell Bequest), all by Jean Pénicaud II; silver panel with the Virgin, St. Elizabeth, and children in colours, and on the back Joseph being let down into the well, in grisaille; circular pax with the Virgin and Child in fine colours, about 1500.

Second shelf. Panels: the Adoration of the Magi, by Suzanne Court (Barwell Bequest); the Crucifixion, probably by Jean de Court; oval panel with the Crucifixion, by Jean Courtois (Barwell Bequest).

F. Top shelf. Panel in architectural frame, the Descent into Hell, by Pierre Reymond, 1542 (Barwell Bequest); two panels with the story of Psyche, Pénicaud school (Barwell Bequest).

Second shelf. Panel in colours, with the Crucifixion, signed by Joane Ambrosio di Landriano, Italian, about 1500.

D, E, F. Bottom. A series of six panels in the original frames, with the story of Cupid and Psyche, after the engravings of the Master of the Die, by Léonard Limousin (Barwell Bequest).

A further series of painted enamels is exhibited in Table-Case 1 (p. 298), and in the Standard-Case in the middle of the mediaeval section of the gallery (p. 299).

TABLE-CASE.—*Ivories, pre-Gothic.*

West Side. On the horizontal surface: two Byzantine panels from a casket with acrobats in the Hippodrome of Constantinople, ninth century; series of morse ivory draughtsmen carved with figures of animals, twelfth century.

First section. On the slope: leaf of a diptych representing an apotheosis, fourth century; magnificent leaf of a diptych with figure of the Archangel Michael, fourth to sixth century (*Guide to Early Christian Antiquities*, 2nd ed., p. 169 and plate I); pierced panel with Bellerophon slaying the Chimaera, sixth century (?); openwork fragment, perhaps from the top of a diptych, said to have come from the Catacombs at Rome; fragment, with symbol of St. Matthew (?), fourth century.



FIG. 198.—Carved ivory panel. Saracenic. Fourteenth century.

Second section. Two sets of panels from caskets with New Testament scenes, about the beginning of the fifth century (see *Guide to Early Christian Antiquities*, 2nd ed., p. 169 and plate II); panel representing Our Lord with the Doctors, and the Baptism, fifth century; panel with the Adoration of the Magi, Syria-Palestine, sixth century, on the back, a prayer written in ink, in a hand dating from about the twelfth century.

Third section. Panels mostly Byzantine, ninth to twelfth century, including panels with the Nativity, Entry into Jerusalem, Vision of Ezekiel (?), Scenes from the History of Joseph (see *Guide to Early Christian Antiquities*, 2nd ed., pp. 169, 170), and the Deësis, with Our Lord between the Virgin and St. John the Baptist, Byzantine, eleventh century (Borradaile Bequest).

East Side. *First section.* On the horizontal surface: whale-bone panel carved with David dictating his psalms, ninth or tenth century. On the slope: Carolingian panels from book-covers and diptychs, from the ninth to the eleventh century.

Second section. On the horizontal surface: remarkable openwork fragment from St. Albans (p. 124 and fig. 72), middle of the

twelfth century ; Saracenic ivory panels, fourteenth century (fig. 198); and cylindrical caskets, fourteenth and sixteenth centuries ; sword-hilt carved with arabesques, Hispano-Moresque, sixteenth century ; Persian carved panels, sixteenth century. On the slope : panels of the eleventh and twelfth centuries, mostly with scenes from the life of Our Lord, including German panels from



FIG. 199.—Ivory panel. Eleventh century.

portable altars ; pectoral cross, English, eleventh century, found near the Priory at Lewes ; leaf of a diptych with the Nativity and Baptism, about 900.

Third section. Carvings of the eleventh and twelfth centuries : bone knife-handle, found in London, eleventh century ; penner (?) found in London, beautifully carved with scrolls and figures of the eleventh to twelfth century ; carving with cattle interlaced, twelfth century, another with gryphons confronted, eleventh to

twelfth century ; head of a tau-cross, and part of a flabellum, twelfth century ; bone draughtsmen with incised ornament ; draughtsmen carved with human and animal figures, twelfth century ; openwork double comb with a scene of combat and inscription, twelfth century ; double comb of the eleventh century with animals in medallions, and a later inscription.

PIER-CASE, A, B, C.

Ivory Carvings. A. *Top shelf.* German tankard of the seventeenth century with figures of Virtues ; small casket ornamented with intarsia and carved bone plaques with the story of Jason, Italian, early fifteenth century ; German cup with stags in relief, eighteenth century ; large horn with incised designs, seventeenth century.

B. *Top shelf.* Four cylindrical boxes (pyxides), one of late Roman pagan art, two with Christian subjects, probably made in Egypt in the sixth century, one of the Carolingian period imitating the earlier style ; figure of a consul, fifth or sixth century ; triptych with the Crucifixion and saints, Byzantine, eleventh century (Borradaile Bequest) ; oliphant with animal designs reproducing Oriental motives, North Italian, eleventh century (Borradaile Bequest).

Second shelf. Large casket ornamented with intarsia and carved bone plaques illustrating the story of Susanna, school of the Embriaco family (fig. 76 and p. 128), and two smaller caskets from the same workshops.

C. *Top shelf.* Part of a flabellum-handle, French, twelfth century ; ivory crozier heads from the twelfth to the fourteenth century ; panel in a wooden frame, the Raising of Lazarus, sixth century ; chess-piece, a bishop seated, with two other figures ; group representing the Adoration of the Magi, middle of the thirteenth century.

Alabaster Carvings in *remaining shelves and on bottom.* Reredos-tables of the fourteenth (fig. 1) and fifteenth centuries with scenes from the lives of Our Lord and the Virgin.

ON THE PIER, BAYS XX and XXI.

Medallion portraits in ivory of the seventeenth and eighteenth centuries (fig. 79), including Sir Christopher Wren and Samuel Pepys, by David Le Marchand ; pearl-shell carvings and portraits in honestone, fifteenth century and later (figs. 199 A and 19).

BAY XXI.

PIER-CASE, D, E, F.—*Ivory and Alabaster Carvings.*

Top Shelf. D. Ivory carvings: two croziers, French and Italian respectively, fourteenth century; triptych with the Virgin and Child, Adoration of the Magi, Nativity, and Presentation in the Temple, French, fourteenth century; two groups of figures, French, fourteenth century, one with four apostles and another figure, the other with the Virgin supported by attendants; triptych with intarsia and bone figures, Embriaco school, North Italian.



FIG. 199 A.—Reliefs in pearl-shell. Sixteenth century.

late fourteenth century; polyptych with scenes from the life of Our Lord, French, fourteenth century (Borradaile Bequest).

E. Ivory statuettes of the Virgin and Child (plate VIII) and Saints, fourteenth century.

F. Ivory horn of West African work, re-carved in Europe and mounted as a drinking horn, with motto:

Drinke you this and thinke no scorne
All though the cup be much like a horne;

statuette of the Virgin and Child, Spanish, sixteenth to seventeenth century; Italian casket with scenes from romance, fifteenth century; alabaster figure of a bishop, perhaps St. Thomas of Canterbury or St. William of York.

Second shelf (except B) and Bottom.

Alabaster reredos-tables, English, fifteenth century, representing heads of St. John the Baptist, scenes of martyrdom, and signs of the Last Judgement.

(The fragments from Kettlebaston Church, Suffolk, are in Pier-Case, Bay XV, F; see pp. 4 and 261.)

TABLE-CASE.—Ivory Carvings.

Vertical upper part. Sections from north to south: (1) remarkable Carolingian reliquary, ninth or tenth century, with the Crucifixion, Maries at the tomb, *Noli me tangere*, and Ascension; head of a tau-cross (plate VII), magnificently carved with foliage and figures, English, early eleventh century, found at Alcester; fine ivory vase with vine-scrolls enclosing busts of angels in medallions, Byzantine, sixth to tenth century: (2) and (3) chessmen of morse ivory, found in the Island of Lewis, dating from the twelfth to the thirteenth century (fig. 56): (4) alabaster carving with figures of saints, fifteenth century; Flemish tankard of the seventeenth century; statuette of St. Catherine, late sixteenth century.

Lower part. Ivories from the thirteenth to the eighteenth century. Attention may be drawn to the following:

West Side. First section. A triptych (fig. 74) bearing in the lower spandrels of the leaves the arms of John Grandison, Bishop of Exeter (1327–69), and a panel of the same character, two of the rare ivories to which an English origin can be ascribed with certainty, being carved in a massive and original style which distinguishes them from contemporary French work.

Second section. Openwork panel with scenes from the Passion, and the Pentecost, showing traces of colour, French, fourteenth century.

Third section. A small coloured carving with the Agony in the Garden and a *pietà* (fig. 75) still coloured, South German, fifteenth century.

Fourth section. Ivory paxes, one signed by Jehan Nicolle (French, about 1500); *memento mori* of the sixteenth and seventeenth centuries.

East Side. First section. Boxwood comb inlaid with ivory, French, fifteenth century; elaborate pierced panels of the fourteenth and fifteenth centuries; honestone carving (fig. 200).

Second section. Series of writing-tablets of the first half of the fourteenth century, with religious and secular subjects; French ivory casket with the story of the Châtelaine de Vergy; fragments of English combs, one thirteenth, the other fourteenth century; Flemish comb, fourteenth, and French comb, sixteenth century.

Third section. Casket with subjects from various romances, French, early fourteenth century (fig. 77); small casket of the

second half of the fourteenth century with its original metal mounts ; casket-panel, a scene from romance—Enyas killing the wild man, French, fourteenth century ; bone plaques in marquetry frame with the Judgement of Paris, Venice, late fourteenth century ; chessmen of the fifteenth and sixteenth centuries ; mirror-cases, chiefly French, fourteenth to sixteenth century (fig. 130).



FIG. 200.—Honestone carving. German.
Sixteenth century.

Fourth section. Panels, statuettes, groups of figures, and other objects, sixteenth to eighteenth century ; Flemish salt with silver-gilt mounts, seventeenth century.

CENTRE OF GALLERY.

(from East to West).

LARGE STANDING CLOCK.

According to an unverified tradition this fine clock was made in 1589 for Pope Sixtus V by Isaac Habrecht of Strasburg (fig. 28), to reproduce the type of the great clock, also made by him, in the cathedral of that town. It is said to have remained at the Vatican

for two hundred years, after which it was for some time in Holland. It was purchased in 1850 by Mr. Octavius Morgan, and came to the Museum in 1888, forming part of his bequest to the nation.

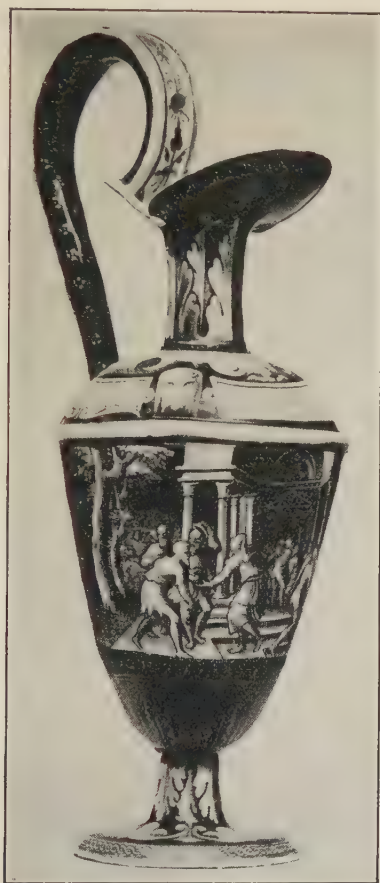


FIG. 201.—Enamelled ewer, by Pierre Reymond.
Limoges. Sixteenth century.

The clock is in the form of a tower with three stories, the two lower having three dials, one engraved with feast days, holy days, and astronomical signs and figures, the other two showing the minutes and hours, and two figures which move a scythe and an hour-glass respectively at the striking of the hour. The top story

is occupied by groups of automatic figures driven by the clock-mechanism, comprising angels doing obeisance to the Virgin and Child, the gods of the days of the week, the four states of social life, a figure of Death, and Our Lord. The whole structure is surmounted by a cock, which crows and flaps its wings after the sounding of the chimes. The sides and back are engraved with figures of Cardinal Virtues and the Three Fates, and to the back is attached a pendulum, probably added in the seventeenth century.

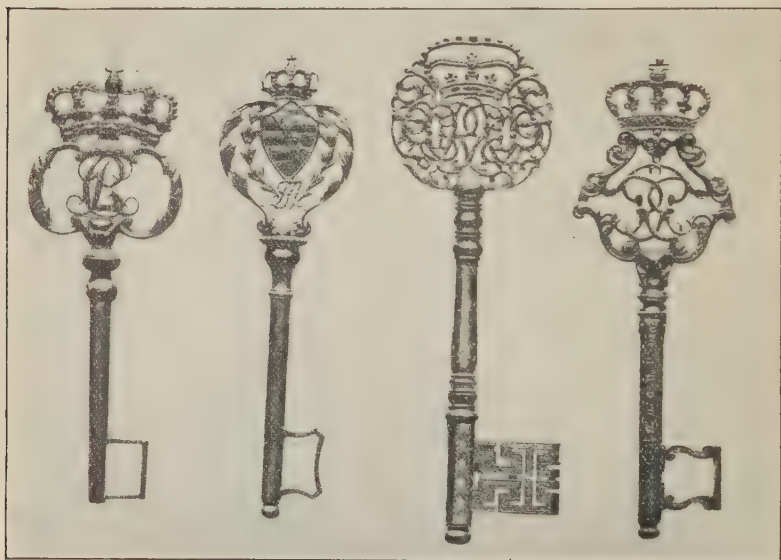


FIG. 202.—Chamberlains' keys.

TABLE-CASE 1.—*Painted Enamels, Chamberlains' Keys.*

North Side. Vertical upper part. French painted enamels of the sixteenth century: ewers in grisaille by Jean Courtois and Pierre Reymond (fig. 201); grisaille plates by Pierre Reymond, P. Courteys, and other artists with scriptural and mythological subjects; grisaille cup and cover, Pénicaud School (Barwell Bequest).

Lower part. Attention may be drawn to the following: a set of plates in grisaille in the style of Pénicaud III illustrating the story of Psyche from engravings by the Master of the Die, after Raphael: twelve coloured panels representing the Sibyls, by Léonard Limousin, about 1550; small circular medallion with the Adoration of the Magi, style of Nardon Pénicaud; plaque with

the Adoration of the Magi, school of Léonard Limousin ; panel with the Annunciation, by Pénicaud I ; panel with the Virgin and Child, by Pierre Reymond ; small plaque with Our Lord taking leave of his Mother, after an engraving in Dürer's Little Passion, in the style of Pierre Reymond—found in Abyssinia at the time of the expedition against King Theodore, with a silver mount bearing an engraved figure of the Saint Gabra Manfas Kedus ; *enseignes* (p. 145) for hats, in grisaille ; oval plaques intended for the backs of mirrors by Suzanne de Court and others ; series of panels from a casket by Jean Court, 1555 ; miniature portrait of a lady dated 1651, and a watch-case with battle scenes, &c., both by H. Toutin (p. 94).

South Side. Lower part. Series of ceremonial keys used by Chamberlains in various European courts in the eighteenth and nineteenth centuries (fig. 202).

STANDARD-CASE.—*Painted Enamels in Grisaille.*

North Side. *Shelf.* Four plates illustrating months, three by Pierre Courteys (Barwell Bequest), one by Jean Courtois ; two hexagonal salt-cellars with the Labours of Hercules, and subjects illustrating the wiles of women, by Pierre Reymond ; rose-water dish representing the Procession of the Seasons, by Pierre Reymond, 1558 (Barwell Bequest).

Bottom. Large oval dish with the Banquet of the Gods, by Jean Courtois ; tazza with cover, Neptune and marine monsters, by Jean Court, called Vigier (Barwell Bequest) ; dish with the story of Cupid and Psyche, probably by Pénicaud II ; tazza with cover, Bacchic scene, perhaps by Pierre Reymond (Barwell Bequest) ; large oval dish with the Creation and the Fall, by Pierre Reymond, dated 1561 (Barwell Bequest).

South Side. *Shelf.* Three plates : the Creation of Adam and the Fall (Barwell Bequest), Pénicaud school, and the Toilet of Psyche, by one of the Pénicaud family ; two ewers by Pierre Reymond, representing Moses striking the Rock, with other scenes and inscription, and the Crossing of the Red Sea (both in Barwell Bequest) ; tazza-cover with Bacchic scene, by Pierre Reymond (Barwell Bequest).

Bottom. Tazza with Dido entertaining Aeneas, by Pierre Reymond (after Marcantonio), 1538 (Barwell Bequest) ; another by him with the same subject, and cover ; tazza-cover with busts in medallions by Pierre Reymond (Barwell Bequest) ; panel with head of the Emperor Trajan, probably by Léonard Limousin.

On the bottom, at the east and west ends respectively, are : cup with low foot, Lot and his daughters, by Pénicaud III, and tazza with Abraham and Melchizedek, by Jean Courtois.

TABLE-CASE 2.—*English and Russian Enamels, Textiles, Counters, Tobacco-pipes, -boxes, and -stoppers.*

North Side. Vertical upper part. *First Section.* Wooden statuette, St. Sebastian, Italian, seventeenth century; bronze pedestal (fig. 127), Italian, sixteenth century; boxwood statuette of Mercury, after John of Bologna, Italian, early seventeenth century; two silver busts, male and female, by Van Vianen, Dutch, about 1640.

Second Section. Silver parcel gilt tabernacle, French, fourteenth century (plate IX); gilt copper chrismatory, Rhenish, c. 1200;



FIG. 203.—Battersea enamels. Eighteenth century.

silver gilt turret, French, fourteenth century; baton of rock crystal with silver gilt mounts set with pearls, North Italian, c. 1500 (plate IX) (all from the Borradaile Bequest); gilt copper reliquary, French, twelfth century.

Third Section. The Crystal of Lothair (p. 103 and fig. 58), and two other Carolingian crystals each with the Crucifixion in intaglio; glass tankard with crystal cover and silver gilt mounts, German, late sixteenth century (Sloane Collection).

Fourth section. Cups of agate and bloodstone of the sixteenth and seventeenth centuries.

Lower part. *First, second, and third sections.* Boxes, flasks, étuis, trays for counters, &c., painted and printed by transfer from copper plates at Battersea, about 1750 to 1760 (fig. 203); medallions and plaques with portraits and figures, printed by transfer at Battersea and Liverpool; badges, medallions, and watch-cover, sixteenth to eighteenth century; enamelled portraits of Titian, on

a snuff box, by Bone, and of Nat. Chauncey, Esq., by E. Burch, 1786. (A few Battersea, &c., enamels also appear on the South Side, horizontal surface.)

Fourth section. Russian painted and champlevé enamels of the seventeenth century, bowls, flasks, casket, &c.: Russian silver cups of the types known as *bratina* and *charka* (fig. 204); silver cups ornamented with niello, eighteenth century. (Some examples appear also on the South Side, horizontal surface.)

South Side. First and fourth sections. Textiles of mediaeval and later date: fragments of Byzantine textiles, eleventh to twelfth century, used as seal bags in the Middle Ages; Arab fragment from Egypt, tenth to twelfth century; figured silk fragments from the tomb of Walter de Cantelupe, Bishop of Worcester (d. 1266; see also South pier adjoining the Franks

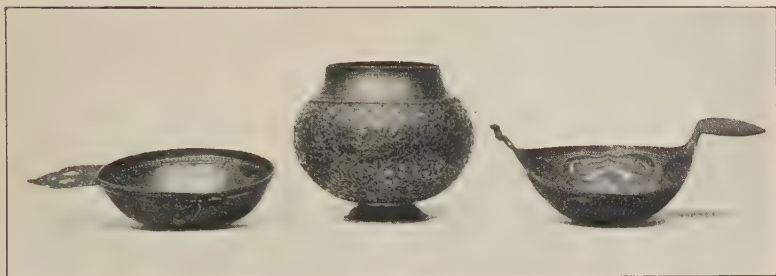


FIG. 204.—Russian silver cups. Seventeenth century.

Room, and p. 236); embroidered bags, one with arms of the Duc d'Hostun (d. 1755), purses and book-covers, seventeenth and eighteenth centuries.

Second section. Carnelian ornaments with designs burnt by acid, Italian, late sixteenth century; counter-boxes and counters, one of gold (p. 54 and fig. 34), the rest silver, some struck in imitation of engraving by the Passe family (p. 54), seventeenth century; box containing sixpences of Queen Elizabeth, used as counters; silver gilt draughtsmen, with devices and mottoes, German, seventeenth century; German wooden draughtsmen, stamped from metal dies with historical events, portraits, and allegorical subjects, late seventeenth century; part of a draughtsman with portrait in relief in wood, sixteenth century.

Third section. Ebony pipe-case carved with figures, portrait in the head with inscription and date, 1626; brass tobacco-boxes of the eighteenth century, engraved and embossed (p. 239 and fig. 153); tobacco-pipes and stoppers of the seventeenth century and later (p. 239 and figs. 152, 154).

PORTRAITS.

On the walls above the cases are hung a number of portraits in oils, which, with a few in the Gold Ornament Room on the Upper Floor, form the remainder of a larger series once belonging to the Museum, the better examples hanging in the Board Room, or in the National Picture Galleries to which they have been transferred.

In the King Edward VII Gallery may be remarked portraits of Sir Thomas Cotton (d. 1662), probably by Cornelius Janssen, between Bays XI and XII; a contemporary portrait of Mary Queen of Scots on the south wall adjoining the Franks Room; and Oliver Cromwell between Bays XIV and XV.

In the Gold Ornament Room are William Courten (d. 1702), whose botanical collections passed to Sir Hans Sloane; Vesalius the anatomist, attributed to Sir Antony More; Ulysses Aldrovandus, naturalist of the sixteenth century; Augustus the Strong, King of Poland; Voltaire; and Cosmo de' Medici, with his secretary Concini, after Titian.

In the Entrance Hall of the Museum are a few pieces of portrait sculpture in marble, including the statue of Shakespeare by Roubiliac, presented by David Garrick.

OBJECTS STANDING ON THE FLOOR.

In the window, Bay XVII, Bronze mortar with figures and ornament in relief and inscription **WILLIAM LAND MADE ME 1612** and founder's mark; a capital from Lewes Priory, Sussex, carved with scriptural subjects; a Flemish bell made by Marc Le Ser, in 1574.

THE FRANKS BEQUEST ROOM.

Sir Augustus Wollaston Franks, K.C.B., Litt.D., D.C.L., F.R.S., P.S.A., was born in 1826, and educated at Eton and Cambridge. He entered the British Museum in 1851, and in 1866 became the first Keeper of the newly formed Department of British and Mediaeval Antiquities, which then included the Ceramic and Ethnographical Collections. During his long tenure of office, which ended in 1896, the year before his death, he systematically increased the various series under his charge not only by his wide knowledge and the wise expenditure of annual grants, but by continual donations, many of great importance. On the occasion of the Fountaine Sale in 1884, he contributed a large sum from his own resources. To his energy was largely due the purchase for

the nation of the Royal Gold Cup in 1892. Other Departments besides his own were benefited by his generosity.

While no year passed without a succession of gifts, he retained in his own hands during his lifetime particular collections (the Oxus Treasure and Early Oriental Silver ; Finger-rings and Jewels ; Drinking-cups), which form the bulk of the objects exhibited in this room. All of these were bequeathed to the nation at his death in 1897, and until 1914 were exhibited in another part of the building. They are now shown in one place, with kindred objects obtained from other sources, and the room is named the Franks Room to honour his memory.

CENTRE OF THE ROOM.

In a special case : the Royal Gold Cup of the Kings of England and France (p. 62 and plate I, frontispiece).

STANDARD-CASES, A, B, C, D.

A. Shelf. Vessels of pottery, porcelain, crystal, glass, &c., of various periods, the majority with silver or silver gilt mounts from the sixteenth to the eighteenth century. Attention may be drawn to the fine Rhodian jug (centre) with English mounts of 1597-8, and to a jug of Venetian lace glass with English silver gilt mounts of 1548. Among the crystal vessels, mostly from the Sloane Collection, may be mentioned a tazza with silver gilt mounts and a medallion of Queen Elizabeth.

Bottom. Cups in various materials, among which may be noted : seventeenth-century wooden bowls and standing cups with engraved figures and shields of arms (one with the arms of James II) ; standing cup made from wood of the Boscobel oak, with silver mounts and date 1646 ; coco-nut cups, German, sixteenth and seventeenth centuries, and Russian, eighteenth century ; German silver cups of fantastic forms, two representing a cock, one an owl, seventeenth century ; pearl-shell cups, probably Turkish, with silver mounts of the seventeenth century.

B. Shelves. English and German stoneware jugs with silver gilt mounts of the late sixteenth century, and jugs of tin-glazed ware with mounts from the sixteenth to the eighteenth century.

Bottom. On the step. Large clock in the form of a ship (*nef*), probably made for the Emperor Rudolph II by Hanns Schlott of Augsburg about 1580 (plate XIV) ; crystal objects : a reliquary with Cufic lettering, Saracenic of the thirteenth century having Italian silver gilt mounts of the fifteenth century ; a spoon with gilt mounts and a cameo head of the sixteenth century, and a figure of a quadruped, Saracenic of the eleventh century : silver gilt bowls, one with an enamelled medallion of St. Paul, and symbols of the

Evangelists, French, fourteenth century, another with the Virgin and Child, and Apostles, inscribed in Russian characters, Russian or Bulgarian, seventeenth or eighteenth century; a tazza with the arms of Martin Scholl, 1597, Augsburg; two small silver sergeants' maces, *temp.* Charles I and II.

On the floor of the case. A series of spoons, including apostle, 'maidenhead', and seal-headed spoons from the sixteenth to the eighteenth century; two shallow silver bowls from the bed of the Rhine, French, fifteenth century; Swiss wine-tasting cup, fifteenth century, and another, 1655; crystal chrismatory with silver-gilt mounts and initials H and K, English (?), sixteenth century; Italian crystal beaker and cover, signed W. M., with marine subjects and silver mounts.

C. *Shelf.* South Side. Amber tankard with figures in relief, North German, 1659, lent by the Vicar and Churchwardens of North Mimms, Herts (compare another amber cup in the Waddes-



FIG. 205.—Mazer. English. Early sixteenth century.

don Bequest, No. 229); crystal standing cup and cover with silver-gilt mounts, believed to have been made by Frère Hugo (p. 61), Flemish, thirteenth century; three pieces of plate deposited by the Rector and Churchwardens of Monken Hadley, Herts, comprising a steeple cup with date-letter for 1610, a standing cup and cover of 1586, and a communion cup of 1562, with paten cover of 1567. Central section: covered silver cup, possibly Carolingian, ninth century; German silver chalice, thirteenth century: silver chalice of the thirteenth century from the Church of Berwick St. James, Wiltshire, with paten of later date (plate III); chalice and paten with name of Presbyter Johann Thon, German, fifteenth century; German maplewood cup, c. 1550; silver bowl engraved inside with a monster, English, thirteenth century; cruet of cast bronze with animals and scrolls in relief, Rhenish, twelfth century. North side: mazers, including a Flemish example with enamelled foot of the fourteenth century (p. 64) and fine English mazers of the fifteenth and sixteenth centuries (pp. 64 and 173, and figs. 115,

116, 205); French silver gilt bowl of mazer form, late fifteenth century; German wooden maplewood cup, c. 1500; Scandinavian drinking-horn of the fifteenth century.

Bottom. Bactrian bronze figure of a lion-gryphon, found near the Helmand River, Afghanistan, perhaps second century B. C. Early oriental silver, the most important objects of which are described on p. 207.

D. Shelf. Silver plate from the sixteenth century. Attention may be drawn to the following: the silver gilt standing cup made for Sir Nicholas Bacon (p. 65 and plate V); the silver beaker with scenes in niello (p. 203 and plate XI) in the centre of the case; the crystal tankard of Lord Burghley with cylindrical body and silver gilt mounts, with his arms enamelled on the cover (p. 64); the Goodricke Cup of 1563, the body formerly of ostrich egg-shell, later of silver; the Aston tankard, with body of ostrich egg-shell and date-letter for 1609; table-ornament in the form of a ship (*nef*: see p. 66), Swiss, c. 1560; the so-called Cellini Cup (p. 66 and fig. 41).

Bottom. Silver cup in the shape of a globe engraved with the map of Oronce Finé, of Lyons, 1531, and resembling another cup at Nancy; silver bucket engraved with the arms of Montmorency, Flemish, sixteenth century; silver wedding cup, Strasburg (?), about 1590 (p. 66); a number of tazzas, wine-cups, beakers, and salvers, &c.

DESK-CASES, WEST WALL.

Southern Case. *First section.* Italian nielloed pendants of the fifteenth and sixteenth centuries; Italian jewellery of the sixteenth century; enamelled Adriatic jewellery consisting of a pendant in the form of a two-headed eagle and ear-rings in the form of ships; Russian enamelled pectoral crosses of the sixteenth and seventeenth centuries; Spanish jewellery of the same period, including devotional pendants with figures enamelled in relief.

Second section. Crystal and silver gilt pinnacle for a shrine, English, fifteenth century; silver gilt cruciform reliquary, Spanish, fifteenth century; Flemish gold brooches and *enseigne* set with gems, fifteenth century; fragment of a gold crown set with sapphires, rubies, and pearls, Rhenish, eleventh century; gold seal of Alexander Seton, first Earl of Dunfermline (1555-1622), and silver seal of Charles Seton, second Earl; German seal, 1532; Italian nielloed scissors, sixteenth century; girdle with plates and medallions, ornamented with niello and enamel, Venetian, early sixteenth century; medallion of translucent enamel, French about 1400; Spanish perfume-ball set with emeralds, sixteenth century; gold pendants, crucifixes, and crosses, seventeenth century; pendent jewels, &c.

Centre Case. *First, second, and third sections.* Gold and silver

objects from the Treasure of the Oxus, the most important of which are described on p. 205: *see* also figs. 133 and 134.

Fourth and fifth sections. Gold ornaments and objects with historical associations, mostly English: gold bulla or seal of Edmund, King of Sicily, second son of Henry III of England (d. 1295); gold hawk's vervel (*see* p. 98) of Henry IV; gold signet-ring of Mary Queen of Scots, with the arms of Scotland and monogram of the Queen and Francis II (fig. 91); Prayer Book said to have been used by Queen Elizabeth, in enamelled gold binding (fig. 87); gold medallion of Queen Elizabeth with enamelled border (the Phoenix jewel); gold watch, said to have belonged to

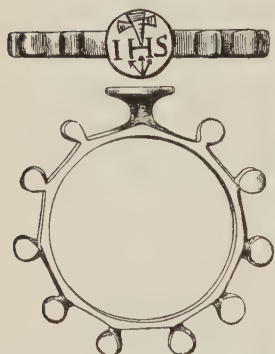


FIG. 206.—Decade ring.



FIG. 207.—Gold pomander frame with pearls. Sixteenth century.

Oliver Cromwell, by Robert Grinkin of London; silver snuffers (fig. 145) with enamelled arms of King Henry VIII and of Cardinal Bainbridge, Ambassador to the Pope (d. 1514); watch given by James II to his daughter the Countess of Anglesey; enamelled memorial of Charles I; ring in memory of the Jacobite lords executed on Tower Hill in 1745; gold snuff-box with portrait of Napoleon I set in brilliants, given by the Emperor to the Hon. Mrs. Damer; gold snuff-box given by Napoleon to Pius VI in 1797, who presented it to Lady Holland; gold watch and snuff-box of Edward Gibbon the historian; enamelled gold snuff-box of Queen Charlotte; gold snuff-box given to Sir Robert Peel by the Corporation of London in 1829 in recognition of his

efforts on behalf of Roman Catholic Emancipation ; other snuff-boxes of the eighteenth century ; mourning-ring in memory of Lord Nelson ; mediaeval English brooches ; gold pomander-case (*see* p. 143), English, sixteenth century ; crosses, crucifixes, pendants, and badges in gold, enriched with enamel or gems, chiefly of the seventeenth and eighteenth centuries, and including a badge of the baronets of Nova Scotia ; Hogarth's gold badge of admission to Vauxhall Gardens issued about 1730 ; small enamelled and jewelled cups, Russian, seventeenth century ; bloodstone cup mounted with jewels, sixteenth century ; large German rosary ring with inscription of the fifteenth century.

Sixth section. Morse (*see* p. 201) of translucent enamel on sunk

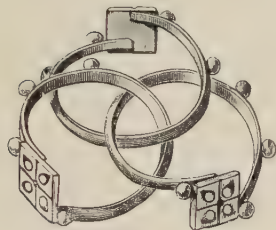


FIG. 208.—Puzzle-ring.

FIG. 209.—Jewish betrothal ring.

relief (*see* p. 86) with the Birth of St. John the Baptist, Sienese, fourteenth century (fig. 49) ; gold mediaeval brooches of the fourteenth century, chiefly English, some inscribed, others set with gems (fig. 85) ; two Hungarian morses of the eighteenth century set with turquoises, &c. (fig. 131) ; enamelled gold reliquary, English, fifteenth century ; enamelled German and Spanish pendants and jewels of the sixteenth century ; enamelled medallions with portraits of Charles I and Charles II ; bloodstone cameo with the head of Christ and crystal intaglio of the same, Italian, sixteenth century ; gold coronation medal of Frederick, King of Bohemia, husband of Elizabeth, daughter of James I ; English jewel with cameo of Queen Elizabeth ; enamelled gold medallion for hat (*enscigne*) of Carolus von Sternsee, German, sixteenth century ; German gold reliquary engraved with the Annunciation, late fifteenth century ; French

gold locket with engraved figure of St. Barbara, sixteenth century ; Russian silver pendants with silver filigree work, sixteenth century ; Jacobite badge, seventeenth century.

Northern Case. *First and second sections.* Mediaeval personal ornaments from Chalcis in Euboea, belonging to the period of the Venetian domination of that island, 1385-1470 (figs. 86. 89). They were discovered in the second half of the nineteenth century ; the portion of the collection here exhibited was purchased by Sir Wollaston Franks and is included in the Franks Bequest, the remainder being preserved in the Ashmolean Museum at Oxford. The present series comprises gold finger-rings, ear-rings, plaques and rosettes of silver and base metal usually gilt, once applied to garments ; buckles, tags, and hooks from girdles ; and a great variety of buttons, globular or hemispherical. Attention may be drawn to the ear-rings, of which relatively few mediaeval examples are found, with niello, enamel, and stones ; a set of shaped plaques with filigree enamel (p. 79) and objects with inscriptions in Lombardic black-letter, Hebrew, or Greek.

Third section. Miniatures of the seventeenth and eighteenth centuries including David Garrick, Peter the Great, the Duke of Cumberland, Augustus the Strong of Saxony, &c. ; enamelled locket with head of Charles I ; *memento mori* ; two Lesser Georges of the Garter of the seventeenth century, one enamelled, the other with a cameo set with gems ; badges of the Order of the Bath ; badge with the number 45, inscribed 'Wilkes and Liberty' and relating to the imprisonment of Wilkes for the publication of No. 45 of the *North Briton* ; various trinkets.

TABLE-CASES.

Northern Case. Gold reliquary for a thorn from the Crown of Thorns, with scenes from the Passion of Our Lord, in translucent enamel, French work, about 1310, given by George Salting, Esq. (fig. 84).

Selected finger-rings, the majority belonging to the Franks Bequest, numbered in the order of the *Catalogue of Finger-Rings (post-classical) in the British Museum*, 1912.

Signet-rings from the twelfth century. Rings with antique gems, mostly with inscriptions, among which may be noted the ring with nicolo intaglio in the bezel and the letters of St. Agatha on the hoop, Italian, fourteenth century ; others with arms and devices, including a Venetian bow-ring (no. 239 and fig. 92). Later examples include rings with arms engraved in crystal, through which the tinctures appear (cf. the signet of Mary Queen of Scots in central Desk-Case, section 4), and the 'Percy signet', English, late fifteenth century (no. 536 : see fig. 94).

Religious rings. Devotional rings from the thirteenth century, including the important Coventry ring, English, of the fifteenth century, with Our Lord in the tomb, the Instruments of the Passion, and the Five Wounds (fig. 97); iconographic rings with figures of saints (p. 150), fifteenth century; decade- and *memento mori* rings from the sixteenth century (p. 149).

Amulet-rings, many with magical inscriptions: the toad-stone rings (p. 151 and fig. 99) may be specially mentioned, a particularly fine example being no. 895, Italian, fourteenth century, having the characteristic legends *Iesus autem transiens* (p. 161) and *Verbum caro factum est*, &c.

Inscribed rings, of which the legend is the chief feature of interest.

Love and Marriage Rings, among which may be noted: inscribed



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FIG 210.—Posy-ring. Seventeenth century.

examples, *fede-rings* and *gimmel-rings* (p. 150), *wedding-rings*, *posy-rings*, *Jewish betrothal rings* (p. 151).

Memorial Rings, including those commemorating persons and events, e.g. the Stuart rings with portraits of Stuart kings, mourning-rings of various types.

Official Rings, in which category appear sergeants' rings (p. 153) and rings of investiture. The so-called Papal rings in the Desk-Case on the North Wall may be included in this category (p. 153)

Fancy Rings, among which may be mentioned dial-rings, poison-rings (p. 153), and puzzle-rings.

Ornamental Rings form a large class, illustrating the changes in taste and fashion from the twelfth to the end of the eighteenth century. The early stirrup-shaped examples dating from the thirteenth century call for special notice; they were set with a single stone, often a sapphire, and some may have been worn by bishops, though hardly as pontifical rings (p. 149 and fig. 81).

In addition to the above examples, the Franks Bequest includes

a series of *Oriental rings*, comprising a number from Persia, Egypt, and Western Asia; Indian and Chinese rings; a fine Javanese series; and a group of *West African rings*, among which the massive rings from Ashanti may be noticed.

Southern Case. Collection of engraved gems numbered in accordance with the *Catalogue of the Engraved Gems (post-classical) in the British Museum, 1915.*¹

Cameos. Religious subjects. The following are worthy of notice: the *Noli me tangere* (no. 14), thirteenth century; the large



FIG. 211.—Shell cameo: Hercules and Cacus. Italian, about 1500.



FIG. 212.—Shell cameo: Ganymede. Late sixteenth century.

cameo on onyx from the collection of Lorenzo de' Medici (no. 18, fig. 59). Mythological and miscellaneous subjects, of which the following may be mentioned: a double cameo (nos. 109, 110) with busts of Hercules and Omphale, given by Charles V to Clement VII, sixteenth century (nos. 109, 110); the Flora of Pistrucci (p. 108) and graceful groups by the Pichlers, Amastini (fig. 213), Cades, and Girometti; a fine portrait-bust (no. 403) of the sixteenth century (fig. 63); three men in a ship (no. 200), thirteenth to fourteenth century (fig. 62); portraits of René of

¹ Early Christian and Byzantine rings and engraved gems are exhibited in the Christian Room, Table-Case A. (Cf. *Catalogue of Early Christian and Byzantine Antiquities*, nos. 1-45, 120 ff.)

Anjou, King of Sicily, 1409-50 (no. 375, fig. 60); portraits of Lorenzo de' Medici, Philip II of Spain, Mary Queen of Scots, &c., and a beautiful portrait-bust of Giangaleazzo Maria Sforza (d. 1494), probably by Domenico dei Cammei, from the Maurice Rosenheim Bequest (fig. 61). A few interesting sixteenth-century cameos on shell may be noted (nos. 57, 103: figs. 211, 212) with which those on a cup (no. 118 in the Waddesdon Bequest) should be compared.

Intaglios. (For Carolingian examples, including the Crystal of Lothair, *see* p. 300). Religious subjects from the sixteenth to the eighteenth century. Mythological subjects from the sixteenth century. Historical, symbolic, and heraldic gems, among which may be noted the Contenance of Scipio (no. 852), by Giovanni Bernardi di Castelbolognese (p. 107), and a battle-scene by the



FIG. 213.—Intaglio, by E. Burch, R.A.; cameo, Cupid and Psyche, by Amastini.

same hand, and a scene of combat, perhaps by Valerio Belli (p. 107). Classical, mediaeval, and modern portrait-busts, the most important being a sapphire intaglio of the fifteenth century, probably of the Duc de Berry (no. 1103); eighteenth-century intaglios include busts by L. Pichler, W. Brown, and E. Burch, R.A. (fig. 213).

In this case are exhibited a number of cabochons of crystal from books of the Gospels, reliquaries, &c., of the twelfth and thirteenth centuries.

OUTSIDE THE CASES.

In the bay of the south window: A coffer covered with incised leather and bound with iron, fifteenth century.

On the west wall: Fragments of wall-paintings illustrating the

Life of Job and the History of Tobit from St. Stephen's Chapel, Westminster, dating from about 1356 (plate XVI). The principal subjects are Job addressing his children ; Job's daughters asking permission to go to the feast ; the destruction of Job's children ; the messenger bringing the news to Job ; the Comforters with Job ; the nuptial feast of Tobias ; Tobit and the sparrow. These paintings are of high importance and interest for the history of English art in the fourteenth century. Front of a Florentine *cassone* or marriage-coffer, painted on panel, about 1450, representing the Battle of the Granicus (334 B.C.) ; alabaster carving in wooden frame with gable-top, the Adoration of the Magi, fifteenth century. Above the central Desk-Case has been painted a panel with the arms of Sir Wollaston Franks, a portrait-medallion of whom is also exhibited.

THE WADDESDON BEQUEST ROOM.

The collection exhibited in this room, situated at the east end of the King Edward VII Gallery, was bequeathed to the nation in 1898 by Baron Ferdinand Rothschild, M.P., and is known as the Waddesdon Bequest, having been preserved during his lifetime at Waddesdon Manor, his residence in Buckinghamshire. While the majority of the objects come within the scope and period of this guide, references being made to many of them in the course of the volume, it has not been thought necessary to give a detailed description of the cases here, in view of the fact that a special guide to the collection (*Guide to the Waddesdon Bequest*, 1899) is published.

PLAQUETTE ROOM.

(Ante-room to the exhibition-room of Coins and Medals on the first floor.)

Wall-Cases : 25. Portraits and reliefs in wax : bust of a young man, Italian, about 1500 ; German portrait busts of the sixteenth century (figs. 159 and 160) ; relief representing the Crucifixion of St. Nestor, Italian, about 1550 ; marriage of Henri IV of France and Marie de Medicis ; medallion portraits by Abraham Simon (? 1622-92 ?), including portrait of the artist (fig. 161).

26. German medallion portraits in pearwood of the sixteenth century (fig. 214) ; boxwood medallions : design for the Great Seal of George III, and portrait of Charles King of Castile, afterwards the Emperor Charles V (fig. 215) ; pearwood medallion portraits of Charles II and James II ; wooden medallion of Oliver Cromwell ; portrait medallions in pearwood of Speaker Onslow,



PLATE XVI. WALL PAINTING, ST. STEPHEN'S CHAPEL, WESTMINSTER, ABOUT 1356.

Religious subjects: The Virgin and Child; Adoration of the Magi; Presentation in the Temple; Flagellation; Crucifixion; St. Sebastian; St. Jerome.

Division IV. Giovanni di Castelbolognese. Secular Subjects: Venus and Cupid; Mars and Mercury; Cupid on a Swan; The Calydonian boar; Neptune; Phaeton; Tityos; Rape of the Sabines; Horatii and Curiatii; Murder of Caesar. Religious subjects: Eleazar and Rebecca at the Well. Ulocrino: Apollo and Marsyas; Death of Meleager; St. Jerome.



FIG. 215.—Boxwood medallion portrait of Charles, King of Castile: afterwards the Emperor Charles V. German, 1516–1519.

Division V. Valerio Belli. A representative series of plaquettes, secular and religious.

Division VI. Andrea Brioso (Il Riccio): Judith and the head of Holofernes (plate XVII); Triumph of a hero; Antique Sacrifice; St. George; and other examples. Giovanni delle Corniole: Sacrifice of Iphigeneia; Judgement of Paris; Ariadne in Naxos; plaquettes for sword-pommels, including Scaevola; and Horatius Cocles.

Left-hand Side.

Division VII. Italian plaquettes, chiefly sixteenth century: Hercules drawing his bow, fifteenth century; Centaur in labyrinth;



PLATE XVII. ITALIAN PLAQUETTES: JUDITH WITH THE HEAD OF HOLOFERNES; THE ANTINOUS OF THE BELVEDERE; MUSIC.

Meleager ; large gilded plaque, Dancing Nymphs ; the Seasons. Plaquettes cast from engraved gems : Apollo and Marsyas ; Ceres and Triptolemus ; Bacchus and Ariadne ; heads of Cicero ; Julia, daughter of Titus ; various Emperors. Plaquettes mounted as *enseignes* (p. 145) : Pyramus and Thisbe (enamelled) ; Laocoon, Lucretia, Apollo, and Daphne ; and others. (Cf. *Div. XI.*)

Division VIII. Italian, chiefly sixteenth century : Two plaquettes, a Satyr, and a Bacchante, attributed to Donatello (cf. the Martelli mirror in the Victoria and Albert Museum) ; Cupid playing ; Sacrifice to Minerva ; Latona on Delos ; Apollo and Muses ; classical busts and scenes.

Division IX. Chiefly Italian, sixteenth century ; the subjects mainly religious. At the top : Virgin and Child, of the fourteenth century ; The Holy Family ; the Annunciation ; the Adoration of the Magi ; the Last Supper ; the Deposition from the Cross ; the Magdalen ; St. Mary of Egypt, by Sansovino ; St. Roch and St. Sebastian. Plaquettes cast from seals : of the Monastery of St. George on Monte Oliveto ; of Roverella, Bishop of Ferrara.

Division X. Chiefly religious subjects. Italian and Spanish, late sixteenth century : The Virgin and Child ; Adoration of the Magi ; Pietà ; Coronation of the Virgin ; St. John Baptist ; St. Jerome ; St. Catherine. At the bottom : a Roman Triumph (School of Riccio).

Division XI. Religious subjects, Italian, with a few Flemish and French examples : Two small plaquettes used as *enseignes*. (Cf. *Div. VII.*)

Division XII. Chiefly classical subjects. Italian, German, and Flemish, sixteenth century : Triumphs ; Combat of Centaurs, by Caradosso ; Music, and Allegorical figure, by Peter Flötner. (Cf. *Div. XIII.*)

Division XIII. Classical and allegorical subjects, chiefly Italian, sixteenth century, by Fra Antonio da Brescia : Sleeping Cupid ; Abundance and Satyr ; Nymph and Satyrs ; Jason ; Mercury (School of Riccio) ; Orpheus, by B. Melioli ; Sacrifice, by Giovanni di Castelbolognese ; Scaevola, and M. Curtius, by Giovanni delle Corniole. Two plaquettes from engraved gems (cf. *Div. VII.*) : the Continnence of Scipio, and Apollo and Marsyas. German plaquettes : Comedy, and Music, by Peter Flötner (cf. *Div. XII.*). Two French plaquettes : Venus and Cupid ; Historical scene.

Division XIV. Religious, chiefly Italian : The Virgin and Child, fifteenth century ; other plaquettes with the same subject, one enamelled ; the Entry into Jerusalem (circular), perhaps from an ivory carving ; Abraham and the Angels, and Christ with the woman of Samaria, by Peter Flötner.

Wall-Cases: 28. Plaquettes other than those of the Whitcombe Greene collection : Bellerophon, attributed to Fran-

cesco di Giorgio; Antinous, from the statue in the Belvedere, discovered 1543 (plate XVII), Paduan, about 1550; Genius of Music, North Italian, towards 1500 (plate XVII), and Satyr and Nymph, Paduan, fifteenth century; the Virgin and Saints, Paduan, fifteenth century; the Adoration of the Magi, by Caraglio; a large plaquette of the same subject, after Parmigianino, Spanish, 1561; four plaquettes with Triumphs of Justice, Charity, Temperance, and another Virtue, German, Nuremberg, 1551 (all from the Rosenheim Collection).

29. North Italian. Valerio Belli: religious and classical subjects; Giovanni delle Corniole: classical allegorical subjects.

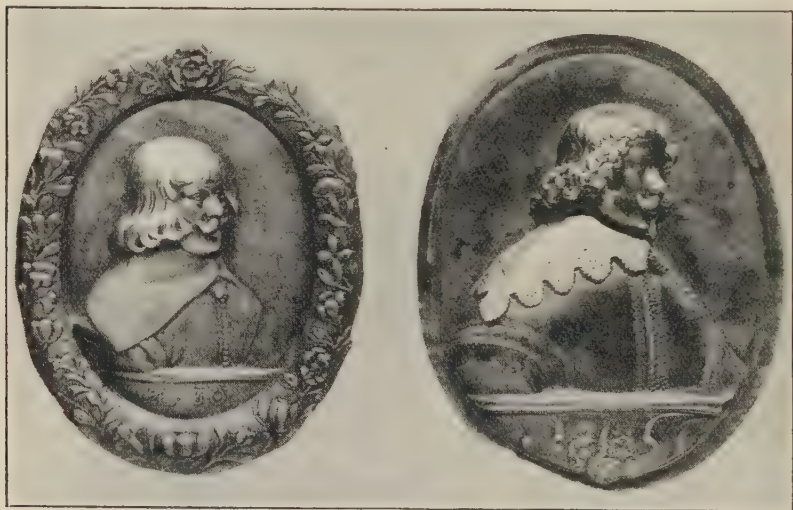


FIG. 216 —Silver portrait-medallions. Seventeenth century.

for sword-pommels. Moderno: Phaeton (two states); Mars and Victory; Hercules and Cacus; Venus, Vulcan, and Cupid; a Lion Hunt; a Combat. Caradosso: Rape of Ganymede. Sword-pommels with plaquettes.

30. North Italian, fifteenth and sixteenth centuries. Fra Antonio da Brescia: Sleeping Cupid. Uloerino: Apollo and Mar-syas; Meleager. Giovanni Bernardi di Castelbolognese: Tityos (in lead); the Resurrection. Head of Diana (School of Donatello). Various other Italian examples, sixteenth century.

31. German and Flemish, sixteenth century. Peter Flötner: Music; Moses striking the rock; Elijah and the Raven; Christ and the woman of Samaria; Dido; Faun and Nymph; Cupid.

The Entombment, Flemish, late fifteenth century. Later Flemish work, including silver portrait busts, seventeenth and eighteenth centuries (fig. 216).

32. French and Spanish plaquettes of the sixteenth and seventeenth centuries: Orpheus; Mars; Triumph of Bacchus. Portraits, perhaps by Cavalier. Spanish religious plaquettes. English portrait busts: Oliver Cromwell, Inigo Jones, the Duke of Marlborough (fig. 217), Queen Anne, Sir Richard Steele, George I.

33. 34. Portrait medallions in pressed horn (fig. 142 and p. 219), and tortoiseshell, and boxes with similar portraits on the lids: among the more interesting portraits are those of Frederick



FIG. 217. - Medallions: the great Duke of Marlborough (d. 1722); portrait of a lady. French, about 1550.

Henry, Prince of Orange, and Amelia, Princess of Orange, made by John Osborn at Amsterdam in 1626; Henri IV of France; the Duc de Sully; Charles I; William III; William and Mary; Queen Anne; and the Duke of Marlborough; several of them by Obrisset (see p. 219); pressed horn boxes with historical and mythological scenes; boxes of pressed wood, chiefly of the early nineteenth century, similarly ornamented with portraits and scenes; tortoiseshell boxes with portraits in silver.

Attention may be drawn to a few mediaeval objects akin to some of those mentioned in this Guide, exhibited by the Department of Manuscripts.

In the Grenville Library (Table-Case 9) will be found the

Psalter of Melisenda, Queen of Fulk, Count of Anjou, and King of Jerusalem, with Byzantine ivory carvings of the twelfth century upon the covers; and a book of the Gospels of the thirteenth century, the cover of which is ornamented with Limoges champ-levé enamel.

In the Manuscript Saloon (Desk-Case IX) is a 'girdle-book' (p. 143), the covers of which are enriched with open leaf-tracery in gold with remains of black enamel. This book is traditionally said to have belonged to Anne Boleyn, and to have been given by her on the scaffold to one of her maids of honour.

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